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Jan. 22, 1931.



ROBERT L. TAYLOR, CENTENNIAL GOVERNOR OF TENNESSEE.

REPORT
ON THE
UNITED STATES GOVERNMENT EXHIBIT
AT THE
TENNESSEE CENTENNIAL EXPOSITION,
NASHVILLE,
1897.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1901.

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Received Jan. 12, 1931.

[PUBLIC RESOLUTION—No. 14.]

JOINT RESOLUTION providing for the publication of the report of the board of management of the United States Government exhibit at the Tennessee Centennial Exposition.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That so much as may be necessary of the unexpended balance of the appropriation of one hundred thousand dollars provided for in section three of the Act to aid and encourage the holding of the Tennessee Centennial Exposition at Nashville in eighteen hundred and ninety-seven, approved December twenty-second, eighteen hundred and ninety-six, be applied to the preparation of illustrations and the printing and binding at the Government Printing Office of six thousand copies of the report of the board of management of the United States Government exhibit at said exposition, under the direction of the chairman of said board.

Approved, March 2, 1901.

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LETTER OF TRANSMITTAL.

MARCH 12, 1901.

To the PRESIDENT:

I have the honor to submit herewith a report on the United States Government exhibit at the Tennessee Centennial Exposition, held at Nashville in 1897, in conformity to the act of Congress approved December 22, 1896.

The publication of the report has been authorized by the joint resolution of Congress introduced by Hon. W. P. Brownlow, Representative from the State of Tennessee, and approved by you on March 2, 1901 (Public, No. 14).

Yours, very respectfully,

J. H. BRIGHAM,
Chairman, Board of Management.

IX

H. Doc. 515—II

WASHINGTON CITY, *January 1, 1898.*

SIR: I transmit herewith a report on the United States Government exhibit at the Tennessee Centennial Exposition held at Nashville in 1897.

There are appended a number of papers and statements bearing upon the Exposition in general, and separate reports of the representatives of the several Executive Departments, the Smithsonian Institution and National Museum, and the Commission of Fish and Fisheries upon the exhibits made by each.

The act of Congress authorizing and providing for the participation of the United States Government in the Exposition appropriated \$100,000 for an exhibit and \$30,000 for the erection of a suitable building.

Total cost of the exhibit made in accordance with the act	\$95,917.41
Unexpended balance.....	4,082.59
Total appropriation.....	100,000.00

The building, providing an aggregate floor area of 45,750 square feet, was erected under the direction of the Secretary of the Treasury at a total cost of \$30,000, including the cost of repairs.

The act limited the portion of the exhibit appropriation available for clerical services to \$10,000. The amount actually expended for this purpose was \$3,179.25.

Yours, very respectfully,

W. V. Cox,
Secretary, Board of Management.

Hon. J. H. BRIGHAM,
*Assistant Secretary of Agriculture and
Chairman Board of Management, Washington City.*



JOHN SEVIER, FIRST GOVERNOR OF TEN-
NESSEE.

REPORT OF THE BOARD OF MANAGEMENT.

On June 1, 1796, Tennessee was admitted into the Union as the sixteenth State, and one hundred years later, on June 1, 1896, the people of Tennessee met in convention in Nashville, the capital city of the State, to celebrate the centennial anniversary of its admission to statehood. It had already been proposed two years earlier that this event, the most important in the history of Tennessee, should be commemorated with becoming dignity and display. With this purpose in view, it was decided that an exposition should be held in which in a purely patriotic spirit there should be exhibited the arts, sciences, and industries of Tennessee, the United States, and other countries of the world.

Nashville, the largest city in the State, conveniently situated for easy access by several railways and with an active and progressive population of nearly 100,000 inhabitants, was selected as the most desirable place in which to hold the Exposition. A fine tract of 200 acres of blue-grass land in the west end of the city was promptly acquired, and under the skillful direction of expert landscape artists the grounds were made beautiful with trees, shrubs, and flowers of the most varied and attractive character.

Financial encouragement was extended willingly from every portion of the State. A stock association was formed with a capital of \$750,000, and subscriptions of over \$300,000 were early received. The State provided generously for the display of its resources and products, and the city of Nashville contributed substantial aid to the amount of \$359,711 toward the consummation of the plans for the Exposition.

The construction of the exhibition buildings was begun in 1896, and they were finished in the time prescribed for their completion. The main buildings, other than the Government building, were the parthenon, auditorium, history, commerce, agriculture, minerals and forestry, hygiene and education, transportation, machinery, woman's, children's, and negro buildings. Of these, the parthenon and history building, destined to be permanent, were of brick, while the remainder were of frame construction. All were covered with white staff except the parthenon, which was of a cream tint and decorated in colors.

It was impossible to complete the buildings and install the exhibits in 1896, and accordingly the actual opening of the Exposition was deferred until May 1, 1897, from which date until October 30, 1897, a period of six months, the Exposition remained opened.

Nearly every State and Territory in the Union participated to some degree, while the States of New York, Illinois, Alabama, Texas, and Arkansas, and the cities of Memphis, Knoxville, Cincinnati, Louisville, and others erected buildings of tasteful designs for exhibition purposes and as gathering places for visitors.

The foreign countries that participated were Great Britain, France, Germany, Austria, Russia, Italy, Switzerland, Norway, Sweden, Denmark, Belgium, China, Canada, Mexico, and Chile.

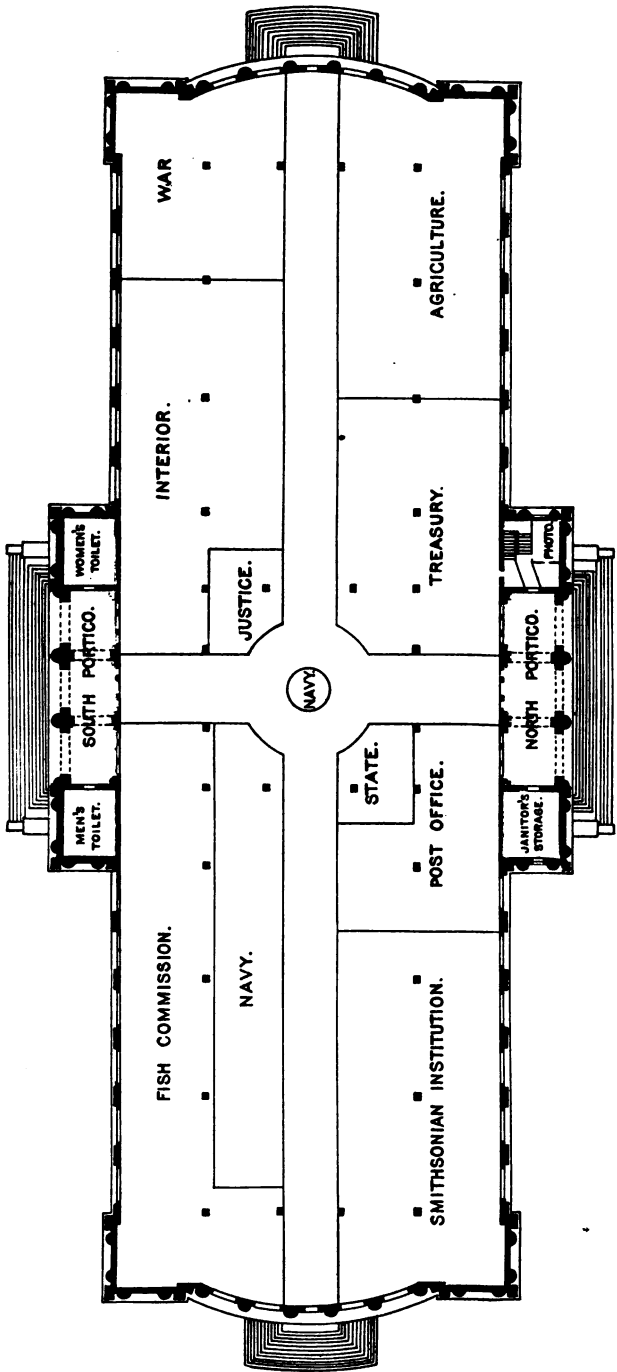
ACT OF CONGRESS.

The request for the participation of the United States Government in the Exposition was submitted to Congress early in 1895. The original bill asking an appropriation having failed, it was not until December of the following year that one was passed. The text of the act authorizing the Government exhibit, approved December 22, 1896, is as follows:

[PUBLIC—No. 1.]

AN ACT to aid and encourage the holding of the Tennessee Centennial Exposition at Nashville, Tennessee, in the year eighteen hundred and ninety-seven, and making an appropriation therefor.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be exhibited at



UNITED STATES GOVERNMENT BUILDING—FLOOR PLAN.

the Tennessee Centennial Exposition, to be held at Nashville, Tennessee, in the year eighteen hundred and ninety-seven, by the Government of the United States, from its Executive Departments, the Smithsonian Institution and National Museum, and the United States Fish Commission, such articles and materials as illustrate the function and administrative faculty of the Government in time of peace and its resources as a war power, tending to demonstrate the nature of our institutions and their adaptation to the wants of the people; and to secure a complete and harmonious arrangement of said Government exhibit a board of management shall be created, to be charged with the selection, purchase, preparation, arrangement, safe-keeping, and exhibition of such articles and materials as the heads of said Departments and institutions of the Government may, respectively, decide shall be embraced in said Government exhibit. The President may also designate additional articles for exhibition. Such board shall be composed of one member to be detailed by the head of each Executive Department, one by the head of the Smithsonian Institution and National Museum, and one by the head of the United States Fish Commission; and the President shall name one of said persons so detailed as chairman; and the members of said board shall have no compensation in addition to their regular salary, and their actual and necessary expenses only shall be paid out of the sum hereinafter appropriated.

SEC. 2. That the Secretary of the Treasury shall cause a suitable building or buildings to be erected on the site selected for the Tennessee Centennial Exposition for the Government exhibit, and he is hereby authorized and directed to contract therefor, in the same manner and under the same regulations as for other public buildings of the United States; but the contract for said building or buildings shall not exceed the sum of thirty thousand dollars, and there is hereby appropriated for said building or buildings, out of any money in the Treasury not otherwise appropriated, the sum of thirty thousand dollars. The Secretary of the Treasury is authorized and required to dispose of such building or buildings, or the material composing the same, at the close of the exposition, giving preference to the city of Nashville or to the said Tennessee Centennial Exposition Company to purchase the same at an appraised value, to be ascertained in such manner as he may determine, and whatever sum may be realized on sale of said building shall be covered into the Treasury of the United States.

SEC. 3. That for the purpose of paying the expenses of the selection, purchase, preparation, transportation, installation, care, and return of said Government exhibit, and for the employment of proper persons as officers and assistants by the board of management created by this act and for their expenses, and for the maintenance of the building hereinbefore provided for, and for other contingent expenses incidental to the Government exhibit, to be approved by the chairman of the board of management and by the Secretary of the Treasury upon itemized accounts and vouchers,

there is hereby appropriated, out of any money in the Treasury not otherwise appropriated, the sum of one hundred thousand dollars, or so much thereof as may be necessary, to be disbursed by the board of management hereinbefore created, of which not exceeding the sum of ten thousand dollars shall be expended for clerical service.

SEC. 4. That all articles which shall be imported from foreign countries for the sole purpose of exhibition at said exposition, upon which there shall be a tariff or customs duty, shall be admitted free of payment of duty, customs fees, or charges, under such regulations as the Secretary of the Treasury shall prescribe; but it shall be lawful at any time during the exhibition to sell, for delivery at the close of the exposition, any goods or property imported for and actually on exhibition in the exposition buildings or on its grounds, subject to such regulations for the security of the revenue and for the collection of import duties as the Secretary of the Treasury shall prescribe: *Provided*, That all such articles, when sold or withdrawn for consumption in the United States shall be subject to the duty, if any, imposed upon such articles by the revenue laws in force at the date of importation, and all penalties prescribed by law shall be applied and enforced against such articles and against the persons who may be guilty of any illegal sale or withdrawal.

SEC. 5. That medals with appropriate devices, emblems, and inscriptions commemorative of said Tennessee Centennial Exposition and of the awards to be made to exhibitors thereat be prepared at some mint of the United States for the board of directors thereof, subject to the provisions of the fifty-second section of the coinage act of eighteen hundred and ninety-three, upon the payment by the Tennessee Centennial Exposition Company of a sum not less than the cost thereof; and all the provisions, whether penal or otherwise, of said coinage act against the counterfeiting or imitating of coins of the United States shall apply to the medals struck under this act.

SEC. 6. That the United States shall in no manner and under no circumstances be liable for any bond, debt, contract, expenditure, expense, or liability of any kind whatever of the said Tennessee Centennial Exposition Company, its officers, agents, servants, or employees, or incident to or growing out of said exposition, nor for any amount whatever in excess of the one hundred and thirty thousand dollars herein authorized; and the heads of the Executive Departments, the Smithsonian Institution and National Museum, and the United States Fish Commission, and the board of management herein authorized, their officers, agents, servants, or employees, shall in no manner and under no circumstances expend or create any liability of any kind for any sum in excess of the appropriations herein made or create any deficiency.

SEC. 7. That the appropriation herein made shall take effect when the Secretary of the Treasury shall be satisfied that the solvent appropriations made by the State of Tennessee, its counties and cities, and by



UNITED STATES GOVERNMENT BUILDING, LOOKING NORTHWEST ACROSS LAKE KATHERINE.

individuals or companies to said centennial exposition, together with solvent subscriptions to the stock of the centennial company made by the State, its counties and cities, and by private corporations, and by individuals, shall amount to at least the sum of one-half million of dollars.

THOMAS B. REED,

Speaker of the House of Representatives.

A. E. STEVENSON,

Vice-President of the United States and President of the Senate.

Approved, December 22, 1896.

GROVER CLEVELAND.

ORGANIZATION OF BOARD OF MANAGEMENT.

By virtue of the act quoted, the heads of the several Executive Departments, the Secretary of the Smithsonian Institution, and the Commissioner of Fish and Fisheries detailed the following gentlemen to act as representatives of their respective departments:

Department of State.—Edward I. Renick, Chief Clerk; Thomas W. Cridler,¹ Third Assistant Secretary.

Treasury Department.—Charles E. Kemper, chief executive officer, Supervising Architect's Office.

War Department.—Capt. H. C. Ward, U. S. A.

Navy Department.—Lieut. C. M. McCormick, U. S. N.; Lieut. Commander J. D. Adams, U. S. N.;¹ Lieut. Commander N. J. K. Patch, U. S. N.;¹ Lieut. Commander L. C. Logan, U. S. N.;¹ Lieut. Commander F. M. Stedman, U. S. N.¹

Post-Office Department.—Kerr Craige, Third Assistant Postmaster-General; John B. Brownlow.¹

Department of the Interior.—Frank W. Clarke, chief chemist, Geological Survey.

Department of Agriculture.—Charles W. Dabney, jr., assistant secretary; Joseph H. Brigham,¹ assistant secretary.

Department of Justice.—Frank Strong, general agent.

Smithsonian Institution and National Museum.—Frederick W. True, executive curator, National Museum.

¹ These gentlemen were appointed to succeed to the vacancies caused by the resignations of their predecessors, and in the case of the Navy Department and the Department of Agriculture the later appointments were not made until after the close of the exposition.

Commission of Fish and Fisheries.—William de C. Ravenel, Assistant Commissioner.

Dr. C. W. Dabney, jr., representative of the Department of Agriculture and president of the University of Tennessee, was designated by President Cleveland to act as chairman of the board of management. On the resignation of Dr. Dabney on January 1, 1898, the Hon. J. H. Brigham, Assistant Secretary of Agriculture, was designated by President McKinley to fill the vacancy in the chairmanship of the board, and was also given charge of closing up the business of that Department in connection with the Exposition.

The board organized on January 27, 1897, and elected Mr. W. I. Adams, chief clerk of the Bureau of International Exchanges, as its secretary; but the Secretary of the Smithsonian Institution, being also the head of that bureau, declined to grant the request of the board for the detail of Mr. Adams. At a subsequent meeting of the board, held February 25, 1897, upon the recommendation of the executive committee, Mr. W. V. Cox, chief clerk of the National Museum, who had previously been designated to take active charge of the exhibits of the Smithsonian Institution and its dependencies, was unanimously elected secretary. Mr. Cox assumed the duties of his office on March 13, 1897, and later was appointed custodian of the Government building at the Exposition by the Secretary of the Treasury.

Upon the appropriation becoming available, the Secretary of the Treasury designated Mr. H. P. R. Holt, of that Department, a special disbursing agent to the Exposition; but on July 1, 1897, assigned Mr. George A. Bartlett, disbursing clerk of the Treasury Department, to the disbursement of the appropriation.

The following standing committees were selected to carry out the work of the board:

Executive committee.—C. W. Dabney, jr., *ex-officio* chairman;¹ F. W. Clarke, C. E. Kemper.

¹Subsequent to January 1, 1898, the date of Dr. Dabney's resignation, Colonel Brigham, as chairman of the board, was *ex-officio* chairman of the executive committee.



UNITED STATES GOVERNMENT BUILDING, LOOKING SOUTHEAST.

Committee on allotments.—F. W. Clarke, chairman; E. I. Renick,¹ W. deC. Ravenel.

Committee on installation and decoration.—F. W. True, chairman; F. W. Clarke, C. M. McCormick.

Upon organizing, the board adopted the following by-laws:

SECTION 1.—*Officers.*²

The officers of the board shall be a chairman, a secretary and disbursing officer, and an executive committee.

SECTION 2.—*Duties of chairman.*

The chairman shall preside at the meetings and approve vouchers, as required by law. He shall control the expenditures of the board so far as may be necessary to prevent any deficit; and all funds required by members of the board shall be obtained by requisition, subject to his approval.

SECTION 3.—*Duties of secretary and disbursing officer.*²

The secretary shall keep the records of the meetings of the board, and conduct its correspondence under the direction of the chairman. He shall also act as disbursing officer and perform such other duties as may be assigned him by the chairman.

SECTION 4.—*Duties of executive committee.*

The executive committee, of which the chairman of the board shall be chairman *ex-officio*, shall be elected by the board, and any vacancies shall be filled by election. The committee shall act upon matters of urgent business in the intervals between the meetings of the board, and their action shall be binding upon the board until its next meeting, and until then only, unless at that meeting approved and sanctioned.

SECTION 5.—*Meetings.*

Meetings shall be held at least once a month, upon the call of the chairman. It shall be the duty of the chairman to call a special meeting upon the request, in writing, of three members of the board.

APPORTIONMENT OF FUNDS.

The appropriation for the participation of the United States Government in the Tennessee Centennial Exposition, including

¹ On the resignation of Mr. Renick, Col. J. B. Brownlow was elected a member of the committee on allotments.

² At the meeting of the board held February 25, 1897, sections 1 and 3 of the by-laws were amended "so as to admit of the office of secretary and that of disbursing officer being held by two persons."

the erection of a suitable exhibition building, was \$130,000, which sum was apportioned as follows:

Construction of building	\$30,000
Department of State	\$3,000
Treasury Department ..	10,000
War Department	6,500
Navy Department	8,000
Post-Office Department	4,000
Department of the Interior.....	12,000
Department of Justice	2,500
Department of Agriculture	14,000
Smithsonian Institution.....	14,500
Commission of Fish and Fisheries	15,500
General fund of the board.....	10,000
	<hr/> 100,000
Total appropriation.....	130,000

The general fund was set aside for the purpose of meeting general expenses of the board, including salaries of clerks to the board, pay of guards, inspectors and cleaners, stationery and supplies, and such other expenditures as were justly chargeable against it.

The construction of the building was under the control of the Treasury Department, the maintenance and repair of the same being in charge of the custodian.

GOVERNMENT BUILDING.

The Treasury Department prepared plans for the Government building, as provided for by law, and let the contract for its construction to Messrs. George Moore & Sons, of Nashville, Tenn., for the sum of \$28,157, with the requirement that the building should be tightly roofed by April 10, 1897, and completed by the 30th of the same month. Despite inclement weather, the building was constructed and the exhibits installed within the very short period of ninety days.

The building was near the main entrance of the Exposition grounds, about 200 feet south of the auditorium building. The style of architecture was of the classic order. The building proper was long and low, surmounted by a central dome, with pavilions at each corner bearing flagstaffs from which floated the national ensign.



UNITED STATES GOVERNMENT BUILDING—SOUTH FRONT, SHOWING PLATFORM FOR LOADING EXHIBITS.

The design of the structure expressed in a most happy manner the simple and dignified character suitable for a Government building, while at the same time enriched moldings relieved its severity and secured an effect harmonious with the purposes to be served. The structure was of frame covered with staff similar to the buildings of the World's Fair in Chicago.

The extreme outside dimensions were 150 by 350 feet, and afforded ample space for the exhibits of the several Departments.

Over the main entrance on the north front of the building were the administrative offices, the building including also a photographic room, guardroom, janitor's closet, toilet room for officials, and two toilet rooms for the public.

After providing for two main aisles, one 20 feet and the other 16 feet in width, crossing each other at right angles in the center of the building, the remaining space was divided into four quadrants, each containing approximately 7,800 feet of floor space. These quadrants were subdivided and the exhibits of the several departments were arranged as shown on the accompanying plan. Beginning on the north side of the east entrance were the exhibits of (1) Smithsonian Institution, National Museum, and its other dependencies; (2) Post-Office Department; (3) Department of State; (4) Treasury Department; (5) Department of Agriculture; and, beginning on the south side of the west entrance, (6) War Department; (7) Department of the Interior; (8) Department of Justice; (9) Navy Department; (10) Commission of Fish and Fisheries.

The allotment of space was assigned as follows:

	Square feet.
Department of State	525
Treasury Department	3, 542
War Department	2, 716
Navy Department	2, 606
Post-Office Department	2, 282
Department of the Interior	4, 560
Department of Agriculture	4, 264
Department of Justice.....	529
Smithsonian Institution and National Museum	4, 996
Commission of Fish and Fisheries	5, 200
Total	31, 220

These assignments were necessarily affected by the structural requirements of the building, the location of partitions and screens having to be determined with reference to the position of windows and posts.

In the allowance to the Post-Office Department, provision was included for the placing of a working post-office, which was located immediately within the north entrance of the building and on the east side of the aisle.

The exhibits of the different Departments were separated by partitions having a uniform height of 12 feet and a cornice and baseboard, the cost of a partition being divided between the Departments separated by it. The partitions and walls were covered with red burlap to the height of 12 feet, above which was undyed burlap, with a strip of red at the top to serve as a frieze; the posts were also covered with red burlap. The committee on installation and decoration succeeded in obtaining a uniformity of installation and the harmonizing of colors employed in decoration, which was most effective.

The exterior of the building was not lighted, much to the regret of the board, the Exposition authorities and the visitors, since all other buildings on the grounds were profusely illuminated.

The interior of the building was lighted at night for policing purposes, four arc and twelve incandescent lights being used. The offices, guardroom, and closets were lighted by ten additional incandescent lights.

PROTECTION AGAINST FIRE.

The inflammable character of the building and exhibits was such that it was necessary to provide fire hydrants and hose sufficient in length to reach every portion of the building. Fire extinguishers, ladders, and buckets of water were also kept in readiness. Strict rules prohibiting smoking in the building were enforced, and at the close of each day during the installation and repacking of exhibits, all shavings and waste materials were taken from the building and burned.



UNITED STATES GOVERNMENT BUILDING, LOOKING EAST.

The Exposition management furnished the Government building with water service, sewage, and electric current, free of charge.

TRANSPORTATION.

The Nashville, Chattanooga, and St. Louis Railway Company extended its tracks to the east end of the Government building, where a platform was constructed for unloading the exhibits.

Freight transportation to the Exposition and return to original shipping point cost but a single rate, the maximum being 83 cents and the minimum 29 cents for each 100 pounds. The terminal charge was 4 cents for each 100 pounds, excepting in cases where the article weighed more than 2,000 pounds, when a special rate was made; this charge was made for unloading the exhibits and placing them in the building, on, or as near as possible to, their proper spaces, and the removing of the exhibits from the building and reloading for reshipment. The total amount expended for freight was \$4,625.14, of which sum \$456.28 was for cartage and terminal charges.

The services of an experienced freight handler were engaged for about two months, to receive and unload the exhibits, and under his supervision no serious breakage or loss was sustained. Shipping labels were attached to each box or crate showing the Department to which it belonged, its contents and weight.

The exhibits began to arrive in Nashville about April 10, the total number of carloads being 40, containing approximately 507,000 pounds of freight, divided between the different Departments as follows:

Name.	Cars.	Pounds.
Department of State and Department of Justice	2	24, 000
Treasury Department	7	90, 000
War Department	4	40, 000
Navy Department	6	102, 000
Post-Office Department	2	17, 000
Department of the Interior	4	65, 000
Department of Agriculture	4	36, 000
Smithsonian Institution and National Museum	8	93, 000
Commission of Fish and Fisheries	4	40, 000
Total	40	507, 000

EMPLOYEES.

A clerk was employed in the office of the secretary of the board, and for a portion of the time a clerk was detailed from the Treasury Department to assist the disbursing officer.

GOVERNMENT GUARD.

The watch force was organized on the plan set forth in the following circular :

RULES AND REGULATIONS FOR GUARDS OF THE GOVERNMENT BUILDING,
TENNESSEE CENTENNIAL EXPOSITION, 1897.

The Government guard of the Tennessee Centennial Exposition shall consist of not less than 16 men, duly appointed by the chairman of the board of management of the Government exhibit.

The members of the guard must be:

First. Reputable citizens of the United States, and between 21 and 35 years of age.

Second. Men who have served with credit either in the United States Army, United States Navy, State or Territorial militia, the "Columbian Guard" of the World's Fair, or on a municipal police force, or who have attended a military school.

Third. Of physical health and vigor, and not less than 5 feet 8 inches in height.

Fourth. Of unquestionable energy and courteous manners.

The guard will be organized in three watches, as follows:

First. Eight o'clock a. m. to 4 o'clock p. m.

Second. Four o'clock p. m. to 12 o'clock midnight.

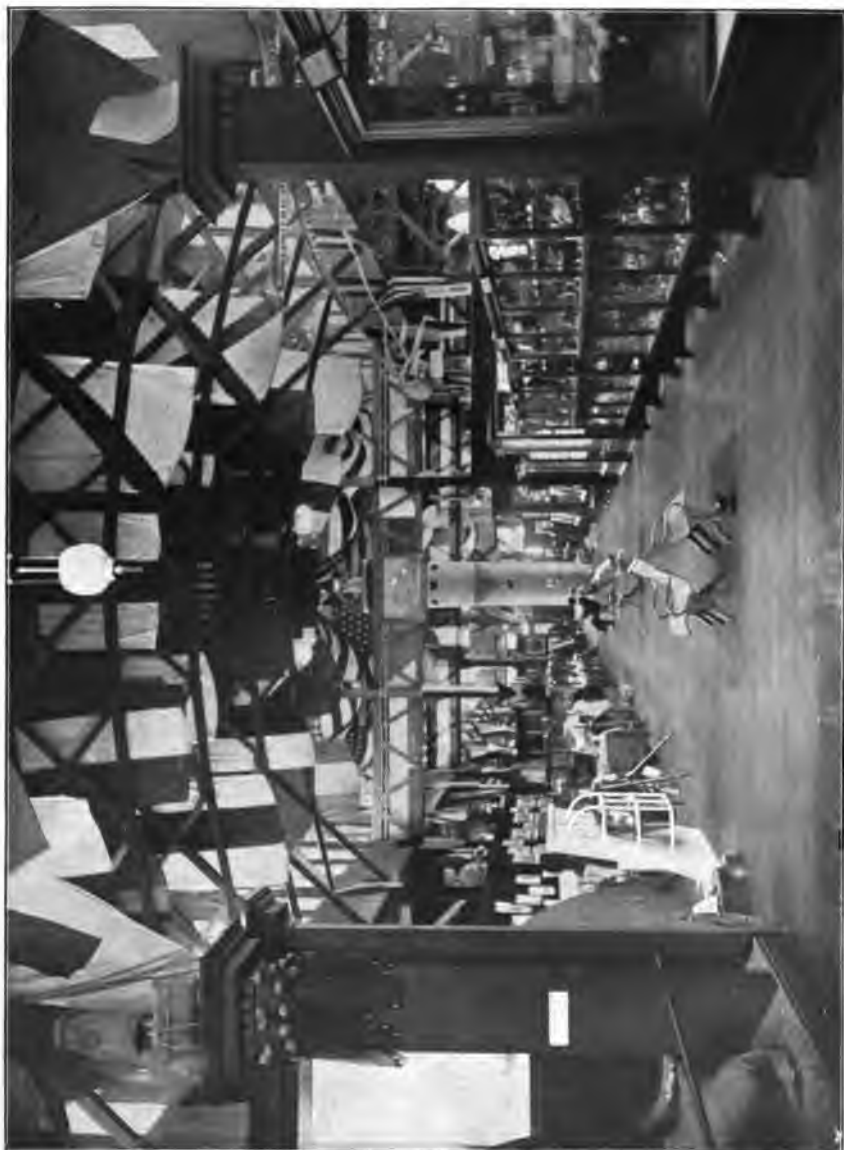
Third. Twelve o'clock midnight to 8 o'clock a. m.

Each watch will be composed of a captain and four men, who shall remain on duty eight hours and until regularly relieved. The guard will be under the control of the captain on duty, who shall act under instructions of the secretary of the board, or, in the absence of the secretary, some one designated by him.

The captain of each watch will be held responsible for the safe-keeping of all property under his care; and his orders must be strictly obeyed by all guards. He will make the rounds of the building at least each hour, and be responsible for the enforcement of these rules.

When on duty, the guard shall wear white duck uniforms, with brass buttons, or regulation five-buttoned blouses, white duck trousers, and white helmet hats.

The watch going on duty at 4 o'clock p. m. shall, upon closing the building to the public, see that there are no strangers remaining in the building,



UNITED STATES GOVERNMENT BUILDING, LOOKING WEST.

that all doors and windows are securely fastened, and that fire plugs, fire hose, fire extinguishers, and ladders are in readiness for immediate use.

The guards shall refuse admission to disorderly persons, and strictly enforce the rules against smoking in the building.

In the case of fire or serious accident the captains of the guard shall immediately notify the custodian of the building, and promptly report any damage to property by accident or otherwise.

After the building is closed in the afternoon and until the hour of reopening, the guards are forbidden, under penalty of dismissal, to allow admission to any persons other than those whose names appear upon the posted pass list or who are provided with properly certified passes signed by the secretary or a representative. This also applies on Sundays; and no exception can be made to friends of the guards. A list of the officers and members of the board of management and the employees of the building, giving their place of residence, will be posted upon the bulletin board in the guardroom, and will be corrected from day to day.

The guards will each be furnished with a whistle for use in signaling, and the following signals from the captains or guards shall be promptly answered: One blast, janitor; two blasts, guards; three blasts, captain; four blasts, fire; five blasts, opening and closing building.

The captains of the second and third watches will see that the United States flags are raised upon the flagstaffs on the building at sunrise and lowered at sunset.

Disobedience on the part of guards or failure to report violations of these rules will be regarded sufficient cause for dismissal.

By order of the board of management:

W. V. Cox,

Secretary and Custodian.

The guards occupied tents a short distance from the east entrance of the building as sleeping quarters during the months of July, August, September, and October. By this arrangement the guards were kept accessible in case of emergency, even when off duty.

DESCRIPTIVE PAMPHLET.

At the meeting of the board held May 8, 1897, each representative was requested to prepare a brief description of the exhibit of his respective department, which was printed in pamphlet form for distribution on the opening day.

OPENING EXERCISES.

Invitations were sent to Exposition, national, State, county, and other officials, and prominent citizens, requesting their

presence at 11 o'clock on the morning of May 17, 1897, an hour before the formal opening of the building to the public, to inspect the exhibits.

Upon the ringing of eight bells (12 o'clock noon) on the naval bell attached to the military mast in the center of the building, a large audience assembled in the rotunda.

In the absence of Dr. Dabney, the chairman, who was unable to be present on account of serious illness in his family, Mr. W. V. Cox, the secretary, announced the completion of the building and the installation of the exhibits, in the following words:

MR. PRESIDENT: In the absence of the Chairman of the Government board of management, it has been delegated to me to announce formally to you the completion of the Government building and the arrangement of the exhibits therein. It has been the endeavor of the Supervising Architect's Office to make this the most satisfactory exhibition building yet constructed by the Government, and its excellent arrangement and exquisite classic beauty are due more largely to the representative of the Treasury Department, who is with us to-day, than to any other man. It has been the effort of the members of the board to prepare and arrange an exhibit that would equal, if not surpass, that of any former exposition, and we hope that you will find both the building and the exhibits a credit to the United States and a gratification to the citizens of Tennessee.

It has been genuine pleasure to the representatives to do this work in your city, where we have been cordially received and heartily welcomed by you, Mr. President, by the Director of Affairs, and by members of your board; by your officials, State, county, and city, and by your citizens generally, and this occasion should not pass without recognition of the many kind expressions of welcome.

With the aid of the gentlemen composing the board, Mr. President, I have prepared a description of the various departments you see around you, which I now have the honor to present to you.

In response, Maj. John W. Thomas, president of the Exposition, said:

MR. SECRETARY, LADIES, AND GENTLEMEN: Twenty-one years ago we celebrated the one-hundredth anniversary of our nationality by having at Philadelphia a grand exposition, costing \$10,000,000 and which was visited by 8,000,000 people. Four years ago we celebrated the four-hundredth anniversary of a great historical event by having at Chicago the greatest exposition the world has ever seen, costing \$30,000,000 and



UNITED STATES GOVERNMENT BUILDING—NORTH FRONT.

which was visited by 28,000,000 people. We are to-day celebrating the one-hundredth anniversary of the admission of Tennessee as the sixteenth State in the Federal Union by having at Nashville a Centennial Exposition, and it is appropriate that the General Government should be represented, because most of the territory of Tennessee was apportioned to the heroes of the Revolution for military services during the struggle for American independence; appropriate because Tennesseans aided in turning the tide of war at Kings Mountain; because Tennesseans drove back the savages, who had been furnished with arms by England; appropriate because a Tennessean routed Packenham at New Orleans; because a Tennessean at San Jacinto avenged the slaughters of Alamo and Goliad, achieving a victory which resulted in the independence of Texas and its annexation to the United States; appropriate because Tennesseans were among the first to storm the heights of Churubusco and Chapultepec and enter the halls of the Montezumas, resulting in the acquisition of New Mexico and California; appropriate because a Tennessean stamped out nullification, declaring, "By the Eternal, the Union must and shall be preserved;" appropriate because the first telegram which flashed over the wires from Baltimore to Washington announced the nomination of a Tennessean as President of the United States, and appropriate because during the perilous periods of reconstruction a Tennessean was the Chief Executive of the nation.

While we are proud of the record of Tennessee and Tennesseans, we rejoice in being one of the sovereign States constituting this great nation, and trust that the exhibit presented here to-day, showing the progress of the nation in the past one hundred and twenty years, will bind us together more closely in a common brotherhood, so that we shall have no North, no South, no East, no West, but a common country under the best government with which the world has ever been blessed; that we shall know one flag, one land, one heart, one hand, one nation forever, where, beneath the sway of mild and equal laws, framed by themselves, one people dwell and know no Lord save God.

On behalf of the management of the Tennessee Centennial, I take pleasure in complimenting you for the energy and ability with which the arduous duties devolving upon you have been so successfully performed in so short a time, and of assuring you as representatives of the United States Government that we appreciate most highly the splendid exhibit with which you have favored us, and which is the crowning glory of our Exposition—an exhibit which will command the admiration of all visitors, and before which every citizen should uncover his head and reverentially thank God that he is a citizen of so great a nation.

On the conclusion of Major Thomas's address, sixteen strokes were struck on the large fog bell in the Light-House Board

exhibit, in honor of the admission of Tennessee as the sixteenth state in the Union. Meanwhile an Eddy kite was flown from the roof of the building by the Weather Bureau officers, as a signal to a battery nearly a mile distant for the firing of a salute of forty-five guns, in honor of each State of the Union. During the firing of the salute, sixteen American flags were unfurled on the building, and in conclusion the Centennial Orchestra played "The Star Spangled Banner," the audience rising.

PROMINENT OFFICIAL VISITORS.

During the life of the Exposition, many officials of the Government, governors of various States, and other persons in official circles were visitors.

On June 11 and 12, President William McKinley visited the Exposition, receiving the public in the Government building on the first-named date. The building was closed to the public shortly before the stated hour of his reception, and the main aisle from the west entrance to the center of the building, and the south aisle, were roped off for the passage of the thousands who came to pay their respects to the President. The Government guard was assisted in managing the throng by a company of regular soldiers under command of Capt. A. M. Wetherill,¹ of the Sixth United States Infantry, and a platoon of the Centennial Guard. President McKinley stood in the rotunda of the building, near the space of the Department of Justice, attended by Secretary Sherman, Secretary Alger, Postmaster-General Gary, Secretary Wilson, and other members of his party, members of the board, State, and Exposition officials; the chairman of the board and the representatives of the War and Navy Departments presenting the visitors. Seats for the ladies of the Presidential party and invited guests were reserved in the spaces of the Department of Justice and the Treasury Department, and also in the north aisle. Music was furnished by the Centennial Orchestra. The execution of the programme was delegated to the secretary of the board.

¹ Killed while commanding his company in battle of July 1 and 2, 1898, San Juan, Cuba.



UNITED STATES GOVERNMENT BUILDING—INTERIOR DURING CONSTRUCTION.

On June 11 the President addressed a notable assemblage in the auditorium. He said:

American nationality, compared with that of Europe and the Orient, is still very young; and yet already we are beginning to have age enough for centennial anniversaries in States other than the original thirteen. Such occasions are always interesting, and when celebrated in a practical way are useful and instructive. Combining retrospect and review, they recall what has been done by State and Nation and point out what yet remains for both to accomplish in order to fulfill their highest destiny.

This celebration is of general interest to the whole country and of special significance to the people of the South and West. It marks the end of the first century of the State of Tennessee and the close of the first year of its second century.

One hundred and one years ago this State was admitted into the Union as the sixteenth member in the great family of American Commonwealths. It was a welcome addition to the national household—a community young, strong, and sturdy, with an honored and heroic ancestry, with fond anticipations not only of its founders, but faith in its success on the part of the far-seeing and sagacious statesmen of the time, in all parts of the country. I am justified in saying that these anticipations have been grandly realized, that the present of this community of sterling worth is even brighter than prophets of the past had dared to forecast it.

The builders of the State, who had forced their way through the trackless forests of this splendid domain, brought with them the same high ideals and fear-less devotion to home and country, founded on resistance to oppression, which have everywhere made illustrious the Anglo-American name. Whether it was the territory of Virginia or that of North Carolina, mattered little to them. They came willing and eager to fight for independence and liberty, and in the war of the Revolution were ever loyal to the standard of Washington. When their representatives served in the Colonial assembly of North Carolina they chose—for the first time in our country, so far as I know—the great name of Washington for the district in which they lived, and at the close of the Revolution sought to organize their territory into a State, to be known as the State of Franklin, in grateful homage to the name of another of its most distinguished patriot commoners.

Spain had sought to possess their territory by right of discovery as a part of Florida. France claimed it by right of cession as a part of Louisiana, and England as hers by conquest. But neither contention could for an instant be recognized. Moved by the highest instincts of self-government, guided by conscience and the loftiest motives of patriotism, under gallant old John Sevier, at Kings Mountain, your forefathers bravely vindicated their honor and gloriously won their independence.

Thus came the new State, second only then of the now mighty West

and Southwest. And it has made a wonderful history for itself. Tennessee has sometimes been called the "Mother of Southwestern statesmen." It furnished us the immortal Jackson, whose record in war and whose administration in peace as the head of the Great Republic shines on with the advancing years. The century has only added to the luster of his name, increased the obligations of his countrymen, and exalted him in their affectionate regard. Polk and Johnson also were products of this great State, and many more heroes of distinguished deeds whose names will come unbidden to your memories while I speak.

Tennesseans have ever been volunteer, not drafted, patriots. In 1846, when 2,400 soldiers were called for, 30,000 loyal Tennesseans offered their services; and amid the trials and terrors of the great civil war, under conditions of peculiar distress and embarrassment, her people divided on contending sides. But upon whichever side found, they fought fearless of sacrifice or death. Now happily there are no contending sides in this glorious Commonwealth or in any part of our beloved country. The men who opposed each other in dreadful battle a third of a century ago are once more and forever united in heart and purpose under one flag in a never-to-be-broken Union.

The glory of Tennessee is not alone in the brilliant names it has contributed to history or the heroic patriotism displayed by the people in so many crises of our national life, but its material and industrial wealth, social advancement, and population are striking and significant in their growth and development. Thirty-five thousand settlers in this State in 1790 had increased to 1,109,000 in 1860, and to-day it has a population closely approximating 2,000,000. Its manufactures, which in 1860 were small and unimportant, in 1890 had reached \$72,000,000 in value, while its farm products now aggregate more than \$62,000,000 annually. Its river commerce on three great international waterways, its splendid railways operating nearly 3,000 miles of road, its mineral wealth of incalculable value, form a splendid augury for the future. I am sure no better workmen could be found than the people of Tennessee to turn these confident promises into grand realities.

Your Exposition shows better than any words of mine can tell the details of your wealth of resources and power of production. You have done wisely in exhibiting these to your own people and to your sister States, and at no time could the display be more effective than now, when what the country needs more than all else is restored confidence in itself. This Exposition demonstrates directly your own faith and purpose and signifies in the widest sense your true and unfailing belief in the irrepressible pluck of the American people, and is a promising indication of the return of American prosperity.

The knowledge which this beautiful and novel Exposition gives will surely develop your trade, increase your output, enlarge your fields of employment, promote inventive competition and extend your markets,

and so eventually pay for all its cost, as well as justify local sentiment and encourage State pride.

Men and women I see about me from all parts of the country, and thousands more will assemble here before the Exposition is closed. Let us always remember that whatever differences about politics may have existed, or still exist, we are all Americans before we are partisans, and cherish the welfare of all the people above party or State. Citizens of different States, we yet love all the States, and in turn all the States, by ties of interest, affection, and immortal memories, are attached to the Nation with unfailing and unceasing love.

The lesson of the hour indeed, then, is this—to be faithful to our opportunities in our several spheres, never forgetting that not one citizen or several citizens have the sole care of our Government, but all the citizens of all the States are equally responsible for its progress and preservation, and all are equal recipients of good or ill. Hopefully looking into the future let us firmly resolve that whatever adverse conditions may temporarily impede national progress, nothing shall permanently stay or defeat it.

Other public receptions held in the Government building were those given by Governor Silas A. Holcomb, of Nebraska, his staff and party, including the Hon. W. J. Bryan, on October 8; the Secretary of the Treasury, Hon. Lyman J. Gage, on October 9; and the president of the Exposition, Maj. John W. Thomas, on October 26.

SUPERVISION OF BUILDING.

During the Exposition, the building was open to the public from 9 o'clock in the morning till 6 o'clock in the afternoon, until late in September, when the closing hour was changed to 5 o'clock in the afternoon, owing to the shortness of the days.

For the comfort and convenience of visitors, electric fans were distributed throughout the building, and in the aisles and open spaces a number of chairs and settees were placed. In order to secure perfect ventilation during the hot weather, the windows, which had been set stationary, were hung on hinges, and in the evenings after the building had been closed to the public wire screens were fastened in the entrances.

After the close of the Exposition, when the electric light plant had been discontinued, gas lights with large reflectors were placed on either side of the military mast in the center of the building for policing purposes.

DETAILED EMPLOYEES.

The following is a statement of the number of persons detailed by the several Departments in connection with the Exposition:

Department of State	2
Treasury Department	17
War Department	6
Navy Department	3
Post-Office Department	3
Department of the Interior	17
Department of Justice	4
Department of Agriculture	13
Smithsonian Institution and National Museum	12
Commission of Fish and Fisheries	13
Total number of actual details	90

In addition to their regular salary, these employees were all reimbursed for their actual traveling and subsistence expenses, according to the following table of allowances for subsistence adopted by the board:

Members of the board, not to exceed \$5 a day.

Secretary and disbursing officer, not to exceed \$4 a day.

Chief agents and higher officials, staying one week or less, not to exceed \$5 a day; staying over one week, i. e., for relatively long periods of time, not over \$3 a day.

Assistants, not to exceed \$2.50 a day.

Laborers, from \$1 to \$2 a day, according to circumstances.

Employees and detailed officials to be classified by the representatives of the Departments from which they were detailed.

The larger number of details were made during the periods of installation and repacking.

The representatives of the War Department secured the services of noncommissioned officers and enlisted men of the United States Army to install and maintain the exhibit of that Department, their salaries being borne by the appropriation for the maintenance of the Army.

REALLOTMENT OF FUNDS.

On July 10, 1897, the board directed the committee on allotments to make a report as to a realloiment of the funds. Each

representative accordingly submitted a statement of the expenditures, liabilities, and estimated future expenses of his respective department, and a reapportionment was made to take effect on August 1, 1897.

In consideration of the original apportionment of funds, transfers authorized by the board from time to time, and the reallocation of funds, the actual apportionment was as follows:¹

Department of State.....	\$2, 647. 17
Treasury Department.....	10, 684. 14
War Department.....	5, 197. 93
Department of Justice.....	2, 200. 33
Navy Department.....	7, 972. 12
Post-Office Department.....	3, 883. 80
Department of the Interior.....	9, 669. 19
Department of Agriculture.....	11, 311. 79
Smithsonian Institution and National Museum.....	16, 074. 70
Commission of Fish and Fisheries.....	16, 255. 10
General fund of the board.....	14, 103. 53
Total.....	100, 000. 00

SUBJECT OF AWARDS.

The board having been requested by the management of the Exposition to enter the Government exhibits in competition for awards, the following report of a special committee was adopted:

There is a general consensus of opinion that the Government is not and can not be in competition with other exhibitors, nor can its several Departments compete with one another. The ordinary entry for awards is therefore out of the question.

It is, nevertheless, quite proper that the Government, as represented by its many bureaus, should receive recognition from the jury of awards and Exposition managers.

The board therefore recommends that the matter of awards be left entirely in the hands of the Exposition authorities and the jury for such action as they deem most desirable. It is also the opinion of the board that if awards are made, they should be entirely official and not to individuals; that is, Departments and bureaus may properly be recognized by the jury, but not persons.

No medals or diplomas were received by the Government from the Exposition management, but the jury of awards offered a report on the exhibits of the several Departments.

¹See statement of transfers of funds, Appendix A.

RESHIPMENT OF EXHIBITS.

With few exceptions, the exhibits were packed and ready for reshipment by November 15, a half month after the close of the Exposition. The last car, however, was not loaded until December 5. In the reshipment of the exhibits, a track was laid to the south entrance of the building, where a platform for loading was constructed.

STORAGE OF PACKING BOXES.

A saving in time of a week and the avoidance of much inconvenience in repacking was gained by the storing of empty packing boxes and crates in the basement of the building. In order to prevent as far as possible the occurrence of fire and consequent destruction of property invaluable and beyond replacing, great care and watchfulness was exercised to prohibit the storing of boxes containing packing material of any kind, and a rigid inspection of the entire basement was made each day as a further precaution.

ADMISSION TO EXPOSITION.

The price of admission to the Exposition was 50 cents for adults, and 25 cents for children under 12 years of age; except after 7 o'clock in the evening, when the price to all was 25 cents. No charge was made by the Exposition management, however, for the admission of persons connected with the Government exhibit, and the usual deposit of \$3 for the photographic pass was waived, by request, in the case of Government employees, the department of admissions of the Exposition promptly furnishing pass cards and photographic passes on the application of the secretary of the board.

Before the opening of the Exposition, the management hoped that the total attendance would reach 2,000,000, which proved a very conservative estimate, for after the close of the fair, when the books of the department of admissions were examined it was found that, in round numbers, 1,886,700 people had passed through the turnstiles. The unexpected and persistent

scourge of yellow fever in the Gulf States not only largely destroyed the patronage from that section of the country owing to the strict quarantine enforced, but also intimidated the people of the North.

Had it not been for the unfortunate occurrence of this dreaded disease, the attendance would unquestionably have exceeded 2,000,000.

The Exposition was closed to visitors on Sundays throughout the six months of its duration.

CO-OPERATION OF EXPOSITION OFFICIALS.

The management of the Exposition recognized the board very courteously, and throughout the work of installing and maintaining the Government exhibit rendered valuable assistance. The board is especially indebted to President J. W. Thomas, Director-General E. C. Lewis, Director of Affairs Dr. W. L. Dudley, Chief Herman Justi of the Bureau of Promotion and Publicity, Chief Clerk W. H. Bruce, Chief J. N. Brooks of the Department of Admissions, Engineer in Charge R. T. Creighton, and Chief Electrician J. A. Pentacost; and the following-named members of the executive committee: E. E. Barthell, G. H. Baskette, Tully Brown, H. W. Buttorff, J. H. Fall, T. D. Fite, Samuel J. Keith, J. J. McCann, A. H. Robinson.

Governor Robert L. Taylor, through his constant interest in the enterprise, made many friends for the Exposition.

EXPOSITION CUSTOMS SERVICE.

In accordance with the provisions of section 4 of the act of Congress, previously quoted, the Secretary of the Treasury prescribed "regulations for the security of the revenue and for the collection of import duties," and established on the Exposition grounds an office of the customs service, of which Mr. James Randall Dunn was in charge.

EXPOSITION POSTAL SERVICE.

It is not inappropriate to mention the success of the post-office located in the Government building and known as the

"Centennial Station of the Nashville Post-Office." The office was opened on May 20, 1897, and continued until November 15 of the same year; in other words, practically the entire period of the Exposition. It was provided with a designated clerk in charge, an assistant clerk, and a force of five carriers. The free-delivery service was very efficient and satisfactory, mail being delivered over the Exposition grounds and collected from boxes placed at various convenient points four times daily. The mail was dispatched from the office to the Nashville post-office by special messenger over the street railway six times daily, registered mail pouches being included twice daily. During its existence the office issued 1,553 domestic money orders, amounting to \$20,193.09, the fees on the same being \$123.90. The registry business consisted of 835 dispatches and 748 receipts. The total sales of postage stamps, postal cards, stamped envelopes and wrappers, and postage-due stamps amounted to \$3,954.41. In addition a small sum was collected for the rent of locked mail boxes at the office.

The management and workings of this station, under the efficient administration of the clerk in charge, Mr. John F. House, was well-nigh perfect. This was remarkable, when the fact is taken into consideration that all nationalities did business with the office, purchasing and receiving international money orders, dispatching and receiving registered letters and packages, etc., it being often difficult and almost impossible to understand the wants of the patrons on account of the imperfect English spoken; yet not one complaint was made of a lost letter or package.

PARTICIPATION OF UNITED STATES ARMY.

It is proper to express the appreciation of the board on the fine showing made by the regular troops of the United States Army in their exhibition drills, participation in parades, sham battles, etc., which proved such valuable attractions for the Exposition. The successes gained were largely due to the efforts of Capt. Henry C. Ward, of the Sixteenth United States Infantry, who not only acted as representative of the War

Department on the board, but without additional compensation from the Exposition management acted as secretary to its military committee, in which capacity he provided for the reception, camping, keeping, and participation of the infantry, cavalry, and artillery, both regular and State.

FUTURE GOVERNMENT EXHIBITION BUILDINGS.

The Government building at Nashville, erected at a cost of less than \$30,000, was so admirably adapted to its purpose that it seems well to call the attention of Congress to that fact, as well as to its moderate cost, so that in future it will not be found necessary to appropriate large sums of money for the construction of buildings for exhibition purposes. Such buildings are temporary at best, and at the end of the Exposition are of little, if any, value to the Government. If it is impossible to provide buildings of a durable nature, it would seem in the interest of economy that the amount appropriated for future exhibition buildings be limited to the minimum, or even that no appropriation be made at all. Should Congress require that the exposition furnish a building in which to place the Government exhibit, it would tend to discourage the asking for appropriations by States, cities, and exposition managements for Government exhibits, which are now so constantly made, and much to the inconvenience of the Executive Departments.

TERMINAL FREIGHT SERVICE.

The board was particularly satisfied with the arrangements for transferring exhibits into the Exposition grounds and unloading from cars into the building. Previous experience at expositions has generally been that these arrangements were very unsatisfactory, and often that unnecessary delay was caused and unreasonable charges made, but at Nashville, although the concession was, as is usually the case, an exclusive privilege, there was neither inefficiency of service nor exorbitance of rates.

EXPENSES OF THE BOARD PROPER.

As already stated, the sum of \$10,000 was set aside as a general fund of the board, for the purpose of meeting such general

expenses of the board as maintenance of the building, salaries of clerks to the board, pay of guards, inspectors and cleaners, stationery and supplies, and such other expenditures as were not justly chargeable to the funds allotted the Departments individually. This was, by various reallotments, increased to \$14,103.53, until eventually all balances of the apportionments to the several Departments were turned in to its credit.

The following is a complete and classified statement of all expenditures made from the general fund:

Services.....	\$8,035.75
Plumbing, repairs to and care of building.....	1,088.19
Travel.....	586.65
Subsistence.....	1,217.74
Expressage.....	58.48
Cartage.....	16.19
Hardware, tools, etc.....	156.99
Glass, paints, brushes, etc.....	44.73
Supplies, etc.....	683.30
Decorations, partitions, etc.....	1,842.29
Miscellaneous and office expenses.....	799.53
Total.....	14,529.84

COST OF EXHIBIT.

Herewith is given a complete statement of all expenditures on account of the Government exhibit, classified both as to the object of the disbursement and the Department incurring the liability. From this statement it will be seen that the total cost of the exhibit was \$95,917.41.

Of this amount but \$3,179.25 was for clerical services, \$10,000 being the limit set by the act of Congress making the appropriation for the Government exhibit.

The board is indebted to Mr. Charles Richards Dodge, of the Department of Agriculture, official photographer to the board, for views of the Government building and exhibit, and also for general views of the Exposition included in this report.

Recognition is here made of the efficient and attentive services rendered by Mr. James L. Farmer, clerk to the secretary; and by Mr. Robert L. Stone, detailed from the National Museum

in connection with the exhibit of the Smithsonian Institution and National Museum, who cooperated in the work of the secretary's office and assisted in the preparation of this report.

The descriptions of the exhibits of the several Departments, appended to this report, have been furnished by the respective representatives, members of the board of management, whose hearty cooperation made the Government exhibit at the Tennessee Centennial Exposition one of the most successful and creditable ever prepared.

W. V. Cox,
Secretary Board of Management.

*Tennessee Centennial Exposition.**Classified statement of expenditures of the board of manage
Exposition,*

Object of expenditure.	Department of State.	Treasury Department.	War Department.	Navy Department.
Services	\$264.00	\$1,330.89	\$1,244.22	\$2,385.66
Special or contract services		120.30		1,680.04
Travel	67.05	460.45	952.74	1,423.02
Subsistence	815.85	2,761.89		743.60
Freight	92.80	752.83	335.19	650.51
Expressage	17.65	193.47	7.75	85.61
Cartage		195.90	20.83	14.95
Exhibition cases, frames, etc.	129.00	410.33		179.60
Lumber and millwork		32.45	10.49	118.77
Hardware, tools, etc.		192.72	88.60	76.44
Glass, paints, brushes, etc.	3.00	60.91	47.85	29.05
Supplies and preparators' material		119.96	669.78	98.47
Packing material		79.32	56.80	45.88
Apparatus, specimens, models, etc.	245.00	490.83	274.68	388.86
Decorations, partitions, railings, etc.		478.07		14.67
Miscellaneous and office expenses	25.25	118.55	91.27	53.74
Plumbing, care of, and repairs to Government building				
Packing, installation, repacking, and unpacking exhibits, by contracts	625.00	2,618.12		
Electric motor for running coin press in Treasury Department exhibit		300.00		
Total	2,284.30	10,716.99	3,800.20	7,988.42

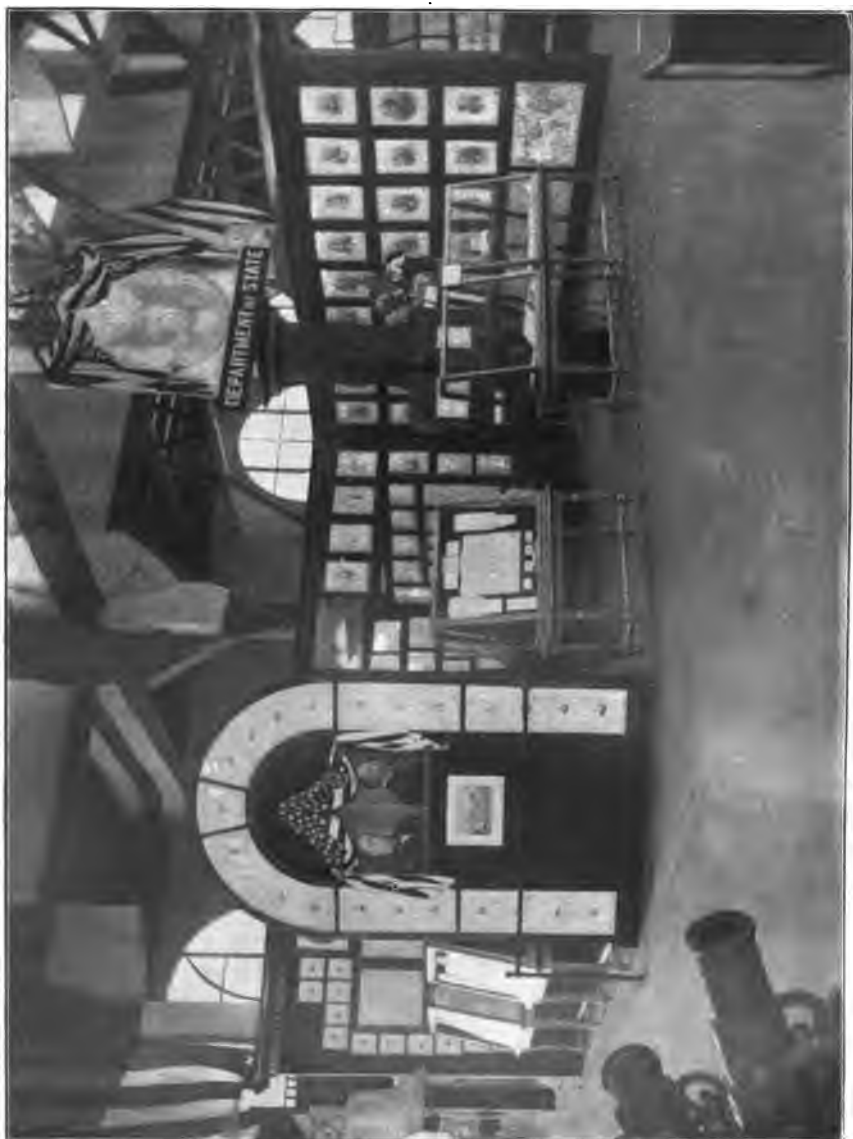
Tennessee Centennial Exposition.

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ment, United States Government exhibit, Tennessee Centennial Nashville, 1897.

Post-Office Department.	Department of the Interior.	Department of Justice.	Department of Agriculture.	Commission of Fish and Fisheries.	Smithsonian Institution and National Museum.	General fund.	Aggregate.
\$1,145.00	\$923.68	\$462.82	\$2,608.67	\$2,131.95	\$7,225.17	\$9,485.75	\$28,207.81
282.65	123.50		163.88	2,325.75	888.95		5,302.42
955.41	3,206.75		462.10	1,136.89	1,015.26	608.95	9,738.56
127.37	693.42	122.70	1,807.29	2,261.10	803.30	1,222.34	11,555.88
36.00		185.40	334.21	366.34	738.19		4,183.66
		92.80	151.45	270.41	168.35	61.18	1,028.94
		37.52	76.26	54.97	77.18	16.19	456.28
608.80	963.03	274.00	1,194.70	3,190.25	314.00		7,263.71
76.99		6.50	55.56	73.29	673.55		1,047.60
82.02			105.12	95.90	124.89	156.99	922.68
19.71			74.80	691.15	1,320.99	44.73	2,292.19
95.89			70.19	1,893.82	301.50	683.30	3,932.91
28.56	133.98		295.35	23.71	163.40		827.00
248.92	2,285.65	64.80	1,273.35	1,131.58	2,157.75		8,561.42
50.75	173.15		43.69	407.30	66.25	1,842.29	3,076.17
43.94	684.80	16.05	192.65	255.36	34.88	822.38	2,338.87
						1,088.19	1,088.19
		550.00					3,793.12
							300.00
3,802.01	9,187.96	1,812.59	8,909.27	16,309.77	16,073.61	15,032.29	95,917.41

Total expenditures for clerical services.....	\$3,179.25
Total expenditures for exhibit.....	95,017.41
Balance unexpended, March 1, 1901.....	4,082.59
Total exhibit appropriation.....	100,000.00
Total expenditures for building.....	30,000.00
Total building appropriation.....	30,000.00



DEPARTMENT OF STATE EXHIBITS—GENERAL VIEW.

REPORT OF THE REPRESENTATIVE OF THE DEPARTMENT OF STATE.

Of the \$100,000 appropriated by an act of Congress approved December 22, 1896, providing for the participation of the United States Government in the Tennessee Centennial Exposition, the Department of State was allotted \$2,700.¹ A floor space of 500 square feet, located near the rotunda of the Government building, was assigned to the Department for its exhibit.

On December 30, 1896, Mr. E. I. Renick, then chief clerk of the Department, was appointed its representative on the board of management. He resigned on April 14, 1897, and on April 30 Mr. Thomas W. Cridler, Third Assistant Secretary of State, was appointed to represent the Department.

Mr. John M. Biddle, a clerk of the Department of class 2, was appointed chief special agent by the Secretary of State, and detailed to assist the representative in the preparation, installation, and maintenance of the exhibit. Mr. H. Warren Smith, a clerk of the Department of class 3, was detailed as special agent and took charge of the exhibit on September 6, 1897, relieving Mr. Biddle, who assumed charge again on October 16, following, and remained until the exhibit was repacked and shipped to Washington, on November 15, 1897.

A young man, resident of Nashville, was appointed as a messenger and remained on duty throughout the Exposition. On September 1, 1897, a second messenger was appointed to distribute certain documents published under the auspices of the Department.

The exhibit of the Executive Mansion, being small, was made part of the exhibit of the Department of State. It comprised

¹ Original allotment.

portraits of the President and Vice-President, and steel engravings of all the Presidents of the United States chronologically arranged, together with a photograph of the Executive Mansion. The official workings of the President's office was summarily shown by a blank form of nomination as sent to the Senate, commissions issued for different offices, samples of stationery, the official seal, a warrant directing the Secretary of State to place the seal of the United States upon an executive instrument, and forms of letters used.

From the historical archives of the Department of State, which contain many rare collections of papers and letters written by men connected with the foundation of the Government, there was exhibited a sample volume of the "Washington Papers," of which there are 313 volumes, embracing manuscript papers of George Washington, including that of December 29, 1783, resigning his commission as General of the Army. One volume, also, from each of the following collections was exhibited: "Madison Papers," in 75 volumes; "Jefferson Papers," in 131 volumes; "Hamilton Papers," in 65 volumes; "Monroe Papers," in 22 volumes, and "Franklin Papers," in 34 volumes. These valuable documents have all been purchased by the Government and arranged in the manner shown by the Department in the exhibit. The manuscripts have been carefully restored, mounted on sheets, indexed, and bound in volumes, such work being now in progress upon the papers of Washington and Hamilton.

The Department has in its custody the original Declaration of Independence, but this precious document has become so faded that it is now necessary to protect it from the light. A facsimile was exhibited with thirty-eight portraits of the signers, accompanied also by an artotype of the original rough draft containing the interlineations and corrections by Adams and Franklin. An artotype of the original Constitution of the United States was shown with thirty-six portraits of the signers. These artotypes so resemble the originals that they are esteemed equally as good for exhibition purposes.

The exhibit included a fine collection of autograph letters

from foreign officials and celebrities to the President of the United States, among them being communications from Robespierre; Barère; Carnot; Louis XVI, King of France; Napoleon I; Jerome Bonaparte; Queen Victoria; Alexander I, of Russia; William I, Emperor of Germany; President Diaz, of Mexico; Ranavalona, Queen of Madagascar, and Chulalongkorn, King of Siam.

Autographs of the Presidents were shown in original proclamations on various subjects. There was a set of portraits of the Secretaries of State; maps showing the growth of the United States diplomatic and consular service; maps showing the expansion of the territory of the United States under treaty provisions; Andrew Jackson's sword; swords presented to the United States by Japan and Siam; Malay crises captured from pirates; a large gold medal set with diamonds and containing a fine cameo bearing a representation of Columbus discovering America, designed and presented to the President of the United States by the Sultan of Turkey, in commemoration of the four hundredth anniversary of the discovery of America; a statuette of George Washington by Baron Marchetti from the original study and model by his master, Houdon of Paris, in 1785-1790, for an equestrian statue, which, according to Thomas Jefferson, then the United States minister to France, was sent to America by Houdon with the expectation of receiving an order from the Congress of the United States to have it cast in bronze, but the model was destroyed by fire in Washington, leaving this statuette as the only survival. It was in possession of the Duke of York, who, at the time of the World's Fair in Chicago, presented it to the United States, and it was placed in the custody of this Department.

The workings of the various bureaus of the Department were carefully outlined, particularly of the passport division, which is of great interest to those contemplating a trip abroad. There were shown the forms of passports used by the Department, forms of application for a passport, those to be used by native citizens, by naturalized citizens, and by persons claiming citizenship through the naturalization of their husbands or parents;

instructions governing the issuance of passports, and a pamphlet, for free distribution, showing the passport regulations of foreign countries.

The following is a statement of the expenditures made by the Department of State for its exhibit:

Contract, including cartage, lumber and millwork, hardware, tools, glass, brushes, supplies and preparators' material, packing material, etc.....	\$625. 00
Services.....	264. 00
Travel	67. 05
Subsistence, including while traveling.....	815. 55
Freight	92. 80
Expressage	17. 65
Paints, floor varnish, etc	3. 00
Apparatus, specimens, etc.....	245. 00
Frames	129. 00
Office expenses	25. 25
Total	2, 284. 30

THOMAS W. CRIDLER,
Representative, Department of State.



TREASURY DEPARTMENT EXHIBITS—THE MINT AND BUREAU OF ENGRAVING AND PRINTING.

REPORT OF THE REPRESENTATIVE OF THE TREASURY DEPARTMENT.

The legislation which provided for an exhibit to be made from the various Executive Departments at the Tennessee Centennial Exposition, held in Nashville, Tenn., during the year 1897, in order to illustrate the administrative functions of the Government, did not become a law until December 22, 1896, and May 1, 1897, was the date fixed by the Exposition authorities for the formal opening. As May 1 approached it was realized by the board of management of the Government exhibit that a perfect installation could not be accomplished by that time, and accordingly the opening of the Government building was postponed until May 17, 1897.

The shortness of the time allowed to collect, prepare, transport, and install is apparent, and it was only by the exercise of the utmost diligence that the exhibit of the Treasury Department was made ready.

The exhibit of the Treasury Department was selected and prepared after conference with the heads of the various offices and bureaus participating in the Exposition, and the bulk of the actual installation was done under contract with Mr. W. H. Veerhoff, of Washington, D. C.

In the assignment of space and the allotment of funds the Treasury Department received, approximately, 3,600 square feet, and the sum of \$10,000, which amount was subsequently supplemented by \$1,000 additional. The following offices and bureaus made exhibits:

The Bureau of the Mint exhibited a coin press from the Philadelphia mint, which was run daily, and which struck a souvenir medal for the Exposition authorities; also a full collection of the national medals, numbering 146, together with a

full set of the current coinage of the United States and other prominent nations. This exhibit, though small, attracted great attention, because it showed at a glance the exact manner in which the metallic coinage of the United States is executed.

The Bureau of Engraving and Printing displayed a plate-printing press in operation, upon which were printed souvenir cards and vignettes of the Executive Mansion and the Capitol and portraits of the President and the Vice-President of the United States; and large frames, handsomely gilded, containing proof sheets of all denominations of United States notes and bonds, and United States postage and internal-revenue stamps. This exhibit showed every denomination of note and bond now issued by the Government, and was instructive as to matter, and dignified in appearance.

The Office of the Register of the Treasury exhibited winged frames showing canceled United States notes and bonds, specimens of old State bank issues and wild-cat money, and specimens of Confederate States notes and bonds, all of which possessed much historical value.

The Office of the Supervising Architect exhibited a handsome collection of perspectives, 22 in number, showing the more recent construction work done by that office.

The Coast and Geodetic Survey displayed a full collection of the standard weights and measures of the United States, and this exhibit, though extremely technical, was handsomely installed and attracted much attention.

The Marine-Hospital Service made a full exhibit, illustrative of its various functions. The exhibit consisted of every instrument and appliance to be found in a first-class hospital, and special features were made of the Roentgen-ray apparatus, which was operated daily during the period of the Exposition, to the delight and wonder of all who witnessed it; and a disinfecting apparatus for the application of steam or formaldehyde gas was an object of much interest to the medical profession, especially due to the fact that during the last three months of the Exposition period yellow fever was prevalent in certain Southern States. At the close of the Exposition this apparatus was immediately



TREASURY DEPARTMENT EXHIBITS—LIGHT-HOUSE ESTABLISHMENT.

shipped to the marine hospital in Memphis, Tenn., for use in combatting the disease in question.

The Light-House Establishment made a complete exhibit of all the lenses and lanterns used in the light-house stations of the Government. The principal feature of this exhibit was a second-order bivalve lense in operation, which was lighted by electricity, and by common consent was conceded to be the most impressive exhibit in the Government building.

The Internal-Revenue Bureau exhibited a framed collection of internal-revenue stamps.

The Office of the Secretary of the Treasury exhibited portraits of the more noted Secretaries.

The entire exhibit of the Treasury Department was transported to Nashville, installed, repacked at the close of the Exposition, and returned to the point of original shipment without loss, breakage, or accident of any kind.

Owing to the fact that the position of Supervising Architect was vacant during the most of the Exposition period, it was found impossible to give much personal attention to the exhibit in Nashville, and accordingly Mr. S. L. Lupton was allowed to represent the Department. Mr. Lupton discharged this responsibility with tact and discretion, and, when the Exposition closed, supervised the repacking and shipment of the exhibit and the return to its proper place of all that portion of the exhibit which came directly to Washington. This was fully accomplished by January 1, 1898, when Mr. Lupton was separated from the service.

The exhibit of the Treasury Department was made at a cost of \$10,716.99, as shown by the following statement of expenditures:

Services.....	\$1, 330. 89
Special services, printing, drafting, repairing apparatus, etc. . .	120. 30
Travel	460. 45
Subsistence, including while traveling	2, 761. 89
Freight	752. 83
Expressage.....	193. 47
Cartage	195. 90
Exhibition cases, office furniture, frames, etc.....	410. 33
Lumber and millwork	32. 45

Hardware	\$192. 72
Glass, paints, brushes, etc.	60. 91
Supplies	119. 96
Packing material	79. 32
Apparatus, medals, photographs, bacteria cultures, etc.	490. 83
Packing, installation, repacking, and unpacking exhibit, by contract.	2, 618. 12
Decorations, partitions, railings, etc	478. 07
Miscellaneous expenses	118. 55
Electric motor for running coin press	300. 00
Total	10, 716. 99

It is hoped that the experience gained at the Tennessee Centennial Exposition will enable the Treasury Department to make a better presentation at the Trans-Mississippi and International Exposition to be held in Omaha, Nebr., during 1898.

CHARLES E. KEMPER,
Representative, Treasury Department.



WAR DEPARTMENT EXHIBITS—GUNS AND UNIFORMED FIGURES.

REPORT OF THE REPRESENTATIVE OF THE WAR DEPARTMENT.

The War Department was represented at the Tennessee Centennial Exposition by Capt. Henry C. Ward, Sixteenth United States Infantry, with Post Q. M. Sergt. Joseph J. Hittinger, United States Army, as his assistant.

The exhibit only represented four branches of the Army, namely, the Quartermaster's, Engineer's, Ordnance, and Signal Corps departments.

The Quartermaster's Department exhibited lay figures, mounted and dismounted, showing the uniforms of officers and men from 1776 to the present, and that of a Puritan soldier of 1620; also a case of chevrons, showing the various insignia of the enlisted branch; two pack mules, showing old and new style of pack saddles used by troops on a campaign against Indians in the far West, where wagon transportation is not available or practicable; also silken colors of regiments, battalions, armies, corps, divisions, and brigades, and a silken guidon of the Seventh Cavalry, of Custer fame.

The Engineer's Department exhibited models of Harlem River improvement, St. Marys Falls canal locks, pontoon bridge apparatus, mortar battery, Hell Gate blockhouse, and lift gun battery; also a number of photographs and a series of sixteen transparencies; a submarine mine group, showing how American harbors and rivers are protected.

The Ordnance Department exhibited a light battery field gun, with carriage and limber complete; Gatling gun, with carriage and limber complete; field mortar and carriage; four gun racks, with a large collection of ancient and modern guns and revolvers, including those now in use in the Army; cavalry and infantry soldiers' complete equipments; armor-piercing shot for 8, 10, and

12-inch rifles; shells for 7-inch Howitzer and 5-inch siege guns; sample boards of the different swords, sabers, and scabbards used in the Army; sample boards of fuses and ammunition, both reloading and nonreloading.

The Signal Corps exhibited the various apparatus used for day and night signaling; photographs of arctic scenes; the famous relics of the Greely relief expedition, the medicine chest, the sealskin boots boiled up to make the last meal, the improvised scales used to weigh rations, the hatchet and piece of flag carried by Lockwood and Brainerd to the farthest north, the oar with its distress signal, a sledge made from pieces of boards and used by Sergeants Rice and Frederick in an unsuccessful attempt to cross to Baird Inlet to obtain the food which had been cached there. Sergeant Rice died on the sledge during this trip and was buried in the snow.

MILITARY ORGANIZATIONS AT THE EXPOSITION.

The military department of the Tennessee Centennial Exposition was conceived and planned during the inaugural parade and ceremonies which occurred in Nashville, Tenn., June 1 and 2, 1896.

The United States troops in that parade consisted of one battalion of nine companies of the Fifth United States Infantry, from Fort McPherson, Ga., commanded by Maj. Charles Porter; one battalion of four companies of the Sixth United States Infantry, from Fort Thomas, Ky., commanded by Lieut. Col. H. C. Egbert; and one squadron of four troops of the Third United States Cavalry, from Jefferson Barracks, Mo., commanded by Lieut. Col. Guy V. Henry. The above organizations numbered about one thousand United States soldiers.

The State troops consisted of the First Brigade of the National Guard, State of Tennessee, under the command of Brig. Gen. A. S. Taylor, nine hundred and sixty officers and men. These troops were all encamped for eight days in East Nashville, on the old Shelby estate, and assisted in all of the features connected with the inaugural ceremonies of the Exposition.

During the following month of April, 1897, the military

department was fully organized, with the following-named committee: Gen. Charles Sykes, adjutant-general, State of Tennessee, chief, Nashville; Capt. Henry C. Ward, United States Army, secretary, Nashville; Capt. John Biddle, United States Army, Nashville; Col. W. C. Smith, First Regiment, N. G. S. T., Nashville; Col. Kellar Anderson, Second Regiment, N. G. S. T., Memphis; Lieut. Col. R. T. Harris, Second Regiment, N. G. S. T., Memphis; Maj. R. W. Parham, Second Regiment, N. G. S. T., Memphis; Maj. E. C. Ramage, First Battalion, N. G. S. T., Knoxville; Maj. J. P. Fyffe, Second Battalion, N. G. S. T., Chattanooga; First Lieut. Charles Gerhardt, United States Army, Lebanon; Col. W. L. Thomas, Nashville; Gen. Jesse Sparks, Murfreesboro; Lieut. R. P. Creighton, Nashville; Mr. John W. Hunter, Nashville; Mr. John Langham, Nashville; Col. R. B. Snowdon, Memphis; Capt. L. B. Tyson, Knoxville; Col. T. K. Huger, Knoxville; Maj. Richard Clark, quartermaster, First Brigade, N. G. S. T.

The director-general of the Exposition assigned to the military department some 48 acres of ground, which were inclosed within the Exposition limits. This ground was admirably adapted for military purposes, undulating and sloping on all sides, with two streams of water running directly through the grounds. These streams were fed by two springs within the military camp. The grounds were nicely parked and shaded with trees.

An estimate of the cost of construction of the military camp was submitted to the director-general, in detail. The maximum cost was \$9,250. The minimum cost was \$3,800. The camps were regularly laid out; water pipes through the company streets supplied filtered city water; three large bathing houses, each containing twelve shower baths, convenient for officers and men, were constructed; latrines were provided through the camps, and ample electric light was furnished.

The United States Government loaned the military department 760 tents, and 250 tents were borrowed from the State of Tennessee, all being floored and provided with straw mattresses.

Copies of military circulars were mailed to the governors and

adjutant-generals of States, to the principal officers and organizations of the National Guard throughout the United States, as well as to the commanding officers of all United States troops. These circulars created a large amount of correspondence for the secretary of the military department, and many of the military organizations sent representatives to Nashville to look over the ground and report as to the advisability of their organizations going to the Exposition.

These representatives were met and shown around the camps and the Exposition and entertained by the military department.

In a few weeks after the circulars were mailed military organizations from all over the United States began to make arrangements to come to the Exposition, by detachments, companies, battalions, and regiments.

The camp was begun April 20, with First Lieut. James A. Maney, Fifteenth United States Infantry, as executive officer, and Maj. Richard Clark, brigade quartermaster of the National Guard, State of Tennessee, as quartermaster. Major Clark was relieved July 20, having to return to his business. Lieutenant Maney remained on duty until the close of the Exposition.

The following-named officers were appointed to look after the active business of the department: Capt. Henry C. Ward, Sixteenth United States Infantry, officer in charge; First Lieut. James A. Maney, Fifteenth United States Infantry, executive officer; First Lieut. Samuel Seay, Fourteenth United States Infantry, instructor; Sergt. Charles Crisler, Sixth United States Infantry, quartermaster-sergeant.

The United States Army officers received no compensation from the Exposition for their services. Laborers were employed to attend such work as was actually necessary. The camps were completed May 20, and the first troops that arrived were the Kentucky State troops (the Louisville Legion), under the command of Col. John A. Castleman.

The sanitary condition of the camps was perfect. The medical officers inspected the camps, streams, and surrounding grounds daily. No sickness of any account occurred during the encampment

It was intended to have United States troops encamped on the military grounds continuously from the opening until the close of the Exposition.

A battalion of the Sixth United States Infantry, from Fort Thomas, Newport, Ky., was present during the months of May and June. The battalions of the Fifth United States Infantry from Fort McPherson, Atlanta, Ga., were to be present July and August, and a squadron of the Third United States Cavalry, from Jefferson Barracks, Mo., was to be present during September and October. It was found that the battalions of the Fifth United States Infantry could not be sent at the time requested, and the battalion of the Fourth United States Infantry from Fort Sheridan, Chicago, Ill., was ordered by the War Department, in place of the Fifth. As the transportation of this battalion would involve a great deal of expense, which had to be paid by the Exposition management, it was thought best not to send for it. The entire Fifth Regiment of United States Infantry was, however, sent October 26, to remain until the close of the Exposition, and did good service. The conduct of the United States troops was excellent in every respect. The discipline was perfect. They had modern camps. Not a soldier was arrested for misconduct. The encampment was a success. Credit is due both officers and men, all of whom assisted in every way in their power to make the military department of the Exposition the success it was.

The troops of the National Guard of the different States, and especially those of the State of Tennessee, behaved remarkably well. No trouble of any account occurred, and the discipline of the troops was good. Several of the States—Ohio, Georgia, Virginia, and Alabama—had their regular encampments at the Exposition instead of in their States.

Nearly every State brought a United States Army officer with the State troops as instructor, adviser, and inspector.

An excellent military mess was formed, so that all the troops could have a mess already established on the grounds, or bring their own mess furniture and run their own messes. Most of the organizations of the National Guard preferred the military

mess. The mess house, fixtures, table furniture, etc., were also supplied by the Exposition company, and the mess hall was capable of feeding 200 soldiers. The mess was conducted by Mr. William Gerst, of Nashville, who is entitled to credit from the military department for his zeal, efficiency, and tact in managing the mess and giving excellent accommodations at reasonable rates. At one time 1,500 soldiers were supplied with food each day. The prices charged were 50 cents a day for three meals, or 25 cents a meal.

Five sham battles were given during the Exposition. Each of these battles was a drawing card. Large crowds came to witness the maneuvers.

The sham battles were given for the pleasure and accommodation of the public, and the best was done with the material on hand at the time they were given. All the sham battles were not up to the required standard from a military point of view. However, they seemed to attract and delight the people.

The dress parades, drills, cavalry drills, and evolutions of the troops on the military plaza drew crowds of people and were among the features and attractions of the Exposition during the entire six months.

The railroad facilities were excellent in every respect. The different railroads in the State transported all the Tennessee State troops to the Exposition free. United States troops were also transported free, and extra special rates were made for military organizations all over the South and North. The troops on arrival were side-tracked inside the Exposition grounds almost into their military camp. The Exposition management unloaded and loaded the baggage of the arriving and departing troops free. Cars were furnished promptly and freely and side-tracked near the camps to remove the returning troops and their baggage at all hours of the day and night.

The military department furnished escorts and troops for all the great parades in the city; also in the Exposition grounds. The governors of the States and the principal delegations were received, escorted, and paraded from their hotels to the Exposition grounds by the military department, and many of the



WAR DEPARTMENT EXHIBITS—MODELS OF FORTIFICATIONS, MINES, ETC.

governors were given reviews and parades by the troops on the military plaza, as well as official receptions given at the military headquarters.

Application was made for the West Point cadets, and at one time it looked as if the application would be successful; but the War Department decided not to order the corps, as the military commandant at West Point reported that it would be injurious to the cadets to take them from their studies and duties at that time and season of the year.

The Exposition has taken the lead in having a regular military department, which has been a decided success and has added very materially to the success of the Exposition, financially and otherwise.

Trains loaded with troops, passing through the country, to and from the Exposition, and the interest created by the military in the Exposition, was a very great feature throughout.

The War Department gave every facility possible to assist the military department, as did the governor and adjutant-general of the State of Tennessee.

The following is a list of the organizations of the troops of the United States Army and the different State National Guards that arrived and went into camp in the military grounds. Other organizations visited the Exposition, but did not go into camp.

UNITED STATES TROOPS.

Battalion Sixth, United States Infantry, June 7 to July 30, 1897; Maj. C. W. Miner, commanding; regimental band and four companies.

Squadron Third, United States Cavalry, September 15 to October 30, 1897; Maj. John S. Loud, commanding; four troops of cavalry.

Fifth United States Infantry, October 26 to 31, 1897; Col. H. C. Cook, commanding; headquarters—field and staff, noncommissioned staff, regimental band, hospital corps, and eight companies.

STATE TROOPS.

Louisville Legion, May 24 to 28, 1897; Col. John A. Castleman, commanding; headquarters—field and staff, military band, and eight companies.

First Battalion, National Guard, State of Tennessee, June 11 to 17, 1897; Maj. E. C. Ramage, commanding; military band and four companies.

One company from Charlottee, N. C., June 12 to 16, 1897; Captain Robertson, commanding.

Fourth Virginia Volunteers, June 14 to 18, 1897; Colonel Hodges, commanding; headquarters—field and staff, military band, and eight companies.

Company E, Third Virginia Volunteers, June 14 to 18, 1897; Captain Scruggs, commanding.

Third Battalion, Second Regiment, Georgia Volunteers, June 20 to 27, 1897; Lieutenant-Colonel Huguenin, commanding; four companies.

Company M, First Regiment, Illinois National Guard, "Switzer's Indians," June 20 to 24, 1897; Captain Switzer, commanding.

Company of Confederate Veterans, from Memphis, Tenn., June 21 to 26, 1897; Captain Carnes, commanding.

Company K, Second Regiment, Virginia Volunteers, June 21 to 26, 1897; Captain Kerr, commanding.

Company A, Third North Carolina Volunteers, June 21 to 26, 1897; Captain Bessent, commanding.

Company D, Third Regiment, Virginia Volunteers, June 22 to 27, 1897; Captain Mallory, commanding.

Fifth Regiment Georgia Volunteers, June 22 to 27, 1897; Colonel Candler, commanding; headquarters—field and staff, military band, hospital corps, and ten companies.

Company H, National Guard, State of Tennessee, unattached, June 26 to July 2, 1897; Captain Wardlow, commanding.

Company C, National Guard, State of Tennessee, unattached, July 4 to 11, 1897; Captain Brown, commanding.

Second Battalion, National Guard, State of Tennessee, July 18 to 25, 1897; Maj. J. P. Fyffe, commanding; headquarters—field and staff, military band, and six companies.

Company C, First Regiment, National Guard, State of Tennessee, July 19 to 24, 1897; Captain Crawford, commanding.

Battery of artillery from Atlanta, Ga., July 24 to 25, 1897; Lieutenant Baker, commanding.

Company D, First Regiment, National Guard, State of Tennessee, August 7 to 16, 1897; Captain Gilbrith, commanding.

Fourteenth Ohio Regiment, August 8 to 16, 1897; Colonel Coit, commanding; headquarters—field and staff, military band, hospital corps, and ten companies.

Companies A, B, E, F, G, H, and Battery A, First Regiment, National Guard, State of Tennessee, August 9 to 16, 1897; Colonel Smith, commanding.

Company G, Second Battalion, National Guard, State of Tennessee, unattached, August 10 to 17, 1897; Captain Cole, commanding.

Company I, Second Regiment, National Guard, State of Tennessee, August 20 to 25, 1897; Captain Walker, commanding.

Company B, First Indiana Infantry, August 22 to 29, 1897; Captain Bigler, commanding.

Company D, National Guard, State of Tennessee, unattached, September 2 to 11, 1897; Captain Weeks, commanding.

First Battalion, First Regiment, Alabama National Guard, September 6 to 9, 1897; Major McMullen, commanding; four companies.

First Ohio Light Artillery, September 10 to 16, 1897; Colonel Brush, commanding; headquarters—field and staff, military band, signal corps, hospital corps, and eight batteries.

Belshazzar Band from Chattanooga, Tennessee, September 22 to 23, 1897.

Virginia Military Institute Cadets, October 16 to 22, 1897; Brig. Gen. Scott Shipp, commanding; four companies and military band.

Neeley Zouaves, National Guard, State of Tennessee, September 14 to 17, 1897; Captain Defree, commanding.

Company A, Confederate Veterans, National Guard, State of Tennessee, September 14 to 17, 1897, Captain Carnes, commanding.

Clan-Na-Gael Guards from Chicago, September 19 to 23, 1897; Major Riley, commanding.

Company B, Confederate Veterans, National Guard, State of Tennessee, September 20 to 22, 1897; Captain Cockrill, commanding.

Second Battalion Infantry, National Guard, State of Tennessee, September 20 to 22, 1897; Maj. J. P. Fyffe, commanding; headquarters—field and staff and four companies.

First Regiment Infantry, National Guard, State of Tennessee, September 20 to 22, 1897; Colonel Smith, commanding; headquarters—field and staff, military band, and six companies.

Battery A, artillery, National Guard, State of Tennessee, September 20 to 22, 1897; Captain Cummings, commanding.

Troop A, cavalry, National Guard, State of Tennessee, September 20 to 22, 1897; Captain Huger, commanding.

Putnam Phalanx, Hartford, Conn., October 12 to 13, 1897; Major Bickford, commanding; headquarters—field and staff, military band, and four companies.

Company B, Confederate Veterans, National Guard, State of Tennessee, October 28 to 29, 1897; Capt. Mark Cockrill, commanding.

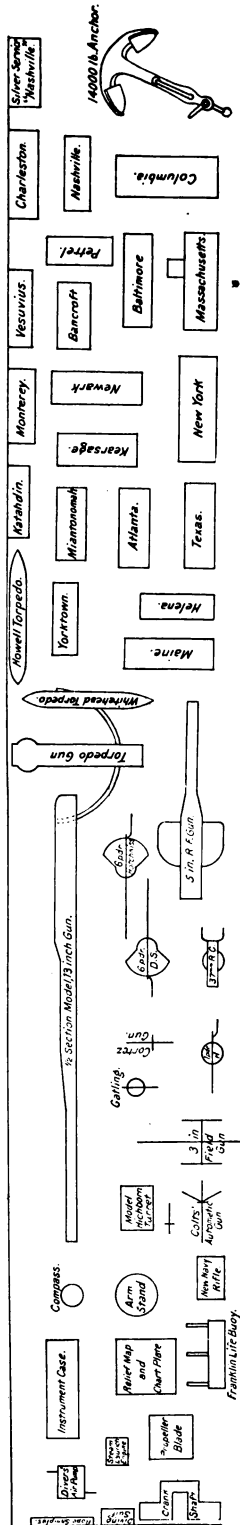
COST OF THE EXHIBIT.

The following statement shows the expenditures made by the War Department on account of its exhibit at the Exposition:

Services.....	\$1, 244. 22
Travel	952. 74
Freight	320. 39
Cartage	20. 83

Expressage	\$7. 75
Lumber and millwork	10. 49
Hardware, tools, etc.	88. 60
Glass, paints, brushes, etc.	47. 85
Supplies and preparators' material.	669. 78
Packing material	56. 80
Apparatus, specimens, etc.	274. 68
Office expenses	91. 27
Total	<hr/> 3, 785. 40

HENRY C. WARD,
Captain, Sixteenth Infantry, U. S. A.,
Representative, War Department.



NAVY DEPARTMENT EXHIBITS—FLOOR PLAN.

REPORT OF THE REPRESENTATIVE OF THE NAVY DEPARTMENT.

It was the endeavor of the representative to make the exhibit of the Navy Department at the Tennessee Centennial Exposition illustrative of the present status of the Navy, and at the same time to make it of the highest educational value possible. To do this prominence was given to the exhibits of the Bureaus of Construction and Repair, Ordnance, Equipment, and Steam Engineering, while other bureaus received little or no attention. Nothing was shown on account of its historical value only, the few old articles exhibited being intended to accentuate the modern improved implements of naval equipment.

The floor space occupied by the naval exhibit was rectangular in shape, being 19 by 134 feet, and in addition to this a central space 14 feet in diameter under the dome of the building was occupied. The exhibit of the Naval Museum of Hygiene was displayed in a rectangular space 12 by 16 feet in the educational building.

The following is a catalogue list of the exhibits:

BUREAU OF CONSTRUCTION AND REPAIR.

Full-size model of military mast of U. S. S. *Helena* in rotunda.
Model of U. S. coast line battle ship *Massachusetts*.
Model of U. S. coast-defense monitor *Miantonomah*.
Model of U. S. coast-defense monitor *Monterey*.
Model of U. S. armored cruiser *Maine*.
Model of U. S. armored cruiser *New York*.
Model of U. S. second-class battle ship *Texas*.
Model of U. S. protected cruiser *Baltimore*.
Model of U. S. protected cruiser *Columbia*.
Model of U. S. protected cruiser *Newark*.
Model of U. S. protected cruiser *Charleston*.

Model of U. S. partially protected cruiser *Atlanta*.

Model of U. S. gunboat *Petrel*.

Model of U. S. gunboat *Yorktown*.

Model of U. S. gunboat *Helena*.

Model of U. S. gunboat *Bancroft*.

Model of U. S. gunboat *Nashville*.

Model of U. S. harbor-defense ram *Katahdin*.

Model of U. S. dynamite-gun vessel *Vesuvius*.

Model of U. S. steam corvette *Kearsarge*.

Half model of U. S. S. *Independence*.

Half model of U. S. S. *Ohio*.

Model of Hichborn turret (metal).

Samples of corn and cocoa cellulose.

Diving suit and accessories.

Franklin life buoy.

BUREAU OF EQUIPMENT.

Case containing samples of rope made at Government ropewalk, Boston, Mass.

Standard compass with stand.

Models of service and patent anchors.

Model of 14,000-pound anchor (full size).

Two and one-half inch chain cable, with shackle and club link.

Navigating sextant.

Navigating octant.

Fiske's stadimeter.

Ship's telescope.

Officer of the deck's telescope.

Clinometer.

Standard metallic thermometer.

Ship's clock.

Aneroid barometer.

Psychrometer and case.

General-service signals.

International signals.

BUREAU OF NAVIGATION, HYDROGRAPHIC OFFICE.

Model of Caribbean Sea.

Engraved plate of chart No. 1290.

Framed diagram showing West India hurricane and law of storms.

Framed diagram showing local weather signals.

Nagasaka, Japan, and Shanghai, China.

Framed diagram showing drift of derelicts. (W. L. White and Fred B. Taylor.)



NAVY DEPARTMENT EXHIBITS—GENERAL VIEW, LOOKING WEST.

Framed weather charts for March 11, 12, and 13, 1897.
Framed Hydrographic Office chart No. 1341.
Portfolio of specimens of Hydrographic Office charts.
Framed pilot chart of North Atlantic Ocean, showing drift of raft logs.
Framed pilot chart of North Pacific Ocean.
Framed Hydrographic Office chart No. 1310.

BUREAU OF ORDNANCE.

Five-inch rapid-firing gun on pedestal mount, Fletcher mechanism, telescopic sights.

Six-pounder Hotchkiss.

Six-pounder Driggs-Schroder.

Two 1-pounder Hotchkiss.

Thirty-seven millimeter Hotchkiss revolving cannon.

Three-inch field gun, on carriage.

Six-millimeter Colts automatic rifle, on stand.

Half section model (full size) of 13-inch breech-loading rifle, showing the various component parts and method of locking; also painting showing penetration of shell.

Case containing 6-millimeter rifles, showing sections through breech mechanism.

Six-millimeter (236 caliber) new navy rifle, with equipment complete.

Case of assorted rifles and carbines (old) and two Colt's revolvers.

Mortar captured at Yorktown.

Mortar made in Philadelphia, 1793.

Spanish gun made in 1490, and brought over by Cortez.

Mexican gun, 1847.

Boat swivel made at navy-yard, Washington, 1858.

Four trophy mortars.

Ten-inch breech plug complete.

Mushroom for 6-inch breech plug fitted with pressure gauges.

Six-inch common shell.

Eight-inch common shell.

Ten-inch common shell.

Twelve-inch common shell.

Thirteen-inch common shell.

Ten-inch armor-piercing shell.

Fifteen-inch S. B. shell, becketed.

Shells which have pierced armor, showing more or less distortion:

Twelve-inch armor-piercing Wheeler sterling.

Twelve-inch armor-piercing Wheeler sterling.

Thirteen-inch armor-piercing Wheeler sterling.

Thirteen-inch armor-piercing Midvale sterling.

Ten-inch armor-piercing Midvale sterling.

Shells which have pierced armor, etc.—Continued.

Ten-inch armor-piercing Midvale sterling.

Eight-inch armor-piercing U. S. R. S.

Eight-inch armor-piercing U. S. R. S.

Six-pounder U. S. P. Co.

Six-inch armor-piercing Carpenter.

Six-inch armor-piercing Carpenter.

Five-inch armor-piercing Carpenter.

Four-inch armor-piercing Carpenter.

Model charge and powder tank for 13-inch breech-loading rifle.

Model charge and powder tank for 6-inch breech-loading rifle.

Five-inch cartridge case and shell.

Five-inch drill cartridge.

Five-inch ammunition box.

Six-pounder cartridge case and shell.

Six-pounder ammunition box.

One-pounder cartridge case and shell.

One-pounder ammunition box.

Board containing samples of primers, fuses, and powders.

Whitehead torpedo tube and mount (broadside lower deck).

Whitehead torpedo.

Howell torpedo.

Torpedo director.

Two Colt's revolvers.

Sample recoil 13-inch breech-loading rifle.

BUREAU OF ENGINEERING.

Section of crank shaft of *Maine*.

Propeller blade of *Maine*.

Engine of steam launch with propeller.

MISCELLANEOUS.

Water color of U. S. S. *Nashville*.

Four cabinets containing photographs.

Thirty-eight photographs, 22 by 28 inches, of United States men-of-war.

Framed drawing of the engines of the U. S. S. *New York*.

Framed drawing showing interior spaces of the U. S. S. *New York*.

Loaned by Harper Brothers, of New York City.

Painting Chase of the *President*, by C. T. Chapman.

Paintings loaned by Carlton T. Chapman, of New York City, as follows:

Building of the *Maine*.

The Boatswain Discourses on the War.

The *Essex* Captures the *Alert*.

Captain Porter Going on Board the *Essex*.



NAVY DEPARTMENT EXHIBITS—MODEL OF 14 000-POUND ANCHOR.

Paintings loaned by Carlton T. Chapman, etc.—Continued.

Young Midshipman Discovers an Enemy in the Fog.

The *Essex* Cutting Out a Bark.

Drawings showing relative sizes of the navies of the world.

Engraving of U. S. S. *Constitution* under full sail.

MUSEUM OF HYGIENE.

Model of crematory.

Alaskan Indian casket for ashes of the dead.

Model of Parsee Tower of Silence.

Disinfecting chamber.

Patent asphyxiator.

Ambulance cot, Gihon.

Ambulance cot, Gorgas.

Ambulance cot, Wells.

Bacteriological case and outfit.

Navy portable operating table.

Sick-bay cot, United States Navy.

Charred plank, boxing around steam pipe.

Lead pipe, rat-gnawed.

Strap, terra cotta.

Tin pipe, corroded.

Lead pipe, corroded externally.

Lead pipe, action of frost.

Tin pipe, action of sewer gas.

Galvanized iron pipe, corroded.

Galvanized iron pipe, action of cold water.

P siphon trap, defective plumbing.

Model Burham trap, terra cotta.

Bath and lavatory connections, defective.

Sample of arsenical wall papers.

Model of water-closet, terra cotta.

Houghton's S trap, terra cotta.

Houghton's V trap, section, terra cotta.

Bad connection lead to iron waste pipe.

Section of old D trap, corrosion and deposit.

Vertical soil pipe, 4-inch, marked deposit.

Lead sewer pipe, corrosion.

Lead pipe and traps from Post-Office Department, various defects.

Iron pipe from heater, marked deposit.

Lead pipe from under bath tub, bad plumbing.

Piece of water-supply pipe, iron, corrosion and deposit.

Lead cold-water pipe, bad plumbing.

Lead waste pipe.

Defective waste pipe, wrapped with rags, etc.

Old lead waste pipe, broken in forcing through wall.
Split in water main.
Waste-water pipe, perforated for dripping.
Lead dripping, deficient calking before running metal.
Lead water-supply pipe, rat gnawed.
Waste-water pipe, rag and putty patched, and rat gnawed.
Old lead trap, hidden openings and deposit.
Double Y broke off and set in end of soil pipe.
Water-supply pipe, rat gnawed.
Water-supply pipe from U. S. T. S. *Richmond*, rat gnawed.
Lead pipe, defective joint (two specimens).
Piece of wash pipe, rat gnawed.
Water pipe obstructed by eel.
Hammer-stretched water pipe.
Lead flange screwed to iron drip pipe, leaky.
Drain and overflow pipe, defective arrangement.
Bath-tub drain and overflow pipe, defective arrangement.
Defective trap, too shallow to make perfect seal.
Unventilated trap, leaky joint.
S trap, cork used to close vent in top of trap.
End of 4-inch T of sewer pipe closed with wooden plug.
Discharge pipe, flattening and openings.
Lead pipe bored by ants.
Bottle trap extensively rat gnawed.
Earthen sewer trap, occluded by roots.
Lead drain pipe, occluded by pins, matches, etc.
Earthen sewer pipe occluded by roots.
Bath-tub waste pipe, gnawed by rats.
Brass soil pipe, nickel plated, United States Capitol.
Soil pipe, defective putty joint, United States Capitol.
Steel drain pipe, United States Capitol.
Brass soil pipe, United States Capitol.
Corroded and broken soil pipe, United States Capitol.
Wall pieces illustrating good and bad plumbing.
Perfect plumbing (four specimens).
Perfect bend and badly dent elbow joints (two specimens).
Traps in section (nine specimens).
Defective bath and basin connections in sections (two specimens).
Samples of blank forms, Medical Department, United States Navy.

The full-size model of the military mast of the U. S. S. *Helena* was erected in the space under the dome of the building. On the forward side of the mast was mounted a ship's bell on which was struck the time, as on shipboard, and arrangements were



NAVY DEPARTMENT EXHIBITS—MODELS OF VESSELS.

made with the Western Union Telegraph Company to furnish the Observatory time at seventy-fifth meridian noon (11 o'clock), and the bell was struck on exact time. The mast carried a model searchlight and four 1-pounder rapid-firing guns. The lower top was utilized as an office.

A handsome table and show case were purchased, in which was displayed the silver service, afterwards presented to the U. S. S. *Nashville* by the citizens of Nashville, Tenn.

The half-section model of the 13-inch gun proved very instructive. This was made in the navy-yard at an expense of \$500.

The 6-millimeter rifle was mounted on a specially-designed table, resting on two standards. On the table were placed wooden blocks showing penetration at 10 feet; also half-inch, three-eighths inch, and one-fourth inch iron plates showing penetration at 10 feet, 100 feet, and 300 feet, respectively.

The employees of the Department in connection with the exhibit consisted of a special agent and four men. Additional men were employed during the periods of installation and repacking.

On December 10, 1897, I received orders detaching me from further duty in connection with the Tennessee Centennial Exposition, and directing me to turn over all unfinished business to Lieut. Commander James D. Adams, U. S. N.

The expenditures on account of the naval exhibit up to the date of my detachment, as above given, were as follows, but slight further expenditures being necessary, if at all:

Services	\$2, 385. 66
Special or contract services	1, 680. 04
Travel	1, 412. 82
Subsistence	743. 60
Freight	650. 51
Cartage	14. 95
Expressage	85. 16
Exhibition cases, frames, models, drawings	179. 60
Lumber and millwork	118. 77
Hardware, tools, etc	76. 44
Glass, paint, brushes, etc	29. 05
Supplies and preparator's material	98. 47

Packing material	\$45. 88
Apparatus and specimens	388. 86
Decorations, partitions, etc.	14. 67
Miscellaneous and office expenses	53. 74
<hr/>	
Total	7, 978. 22

C. M. McCORMICK,
Lieutenant, U. S. N.,
Representative, Navy Department.

The above statement of expenditures on account of the exhibit of the Navy Department has been revised, and includes all disbursements made since the detachment of Lieut. C. M. McCormick as representative.

E. M. STEDMAN,
Lieutenant-Commander, U. S. N.,
Representative, Navy Department



NAVY DEPARTMENT EXHIBITS—GATLING GUN.



POST-OFFICE DEPARTMENT EXHIBITS—GENERAL VIEW.

REPORT OF THE REPRESENTATIVE OF THE POST-OFFICE DEPARTMENT.

The exhibit of the Post-Office Department at the Tennessee Centennial Exposition of the postal service past and present, under act of Congress approved December 22, 1896, for the purpose of representing "such articles and materials as illustrate the functions and administrative faculty of the Government in time of peace, * * * tending to demonstrate the nature of our institutions and their adaptation to the wants of the people" was made in conformity with the intention of the law. As the representative of the Post-Office Department on the board of management, the Postmaster-General designated the Hon. Kerr Craige, Third Assistant Postmaster-General, who had most efficiently represented it at the Atlanta Exposition. Upon the resignation of Mr. Craige in March, 1897, due to his voluntary withdrawal from the public service, Mr. John B. Brownlow, of the office of the Second Assistant Postmaster-General, was appointed his successor.

The representative, upon investigation, found his allotment of space (1,900 feet out of a total of 40,000) inadequate to make a full display of the material available, and the fund of \$4,000¹ (only 4 per cent of the appropriation) which had been allotted his Department insufficient to properly display and maintain more than two-thirds of the material at hand, even though the space were available, and in consequence many articles which would have been of great interest were, of necessity, omitted from the display.

Further investigation revealed the fact that several of the show cases were in such a condition as to be unfit for shipment

¹ Original allotment.

and this necessitated the purchase of new cases. As much as could be spared was expended for this purpose and the appearance of the exhibit much improved. These cases, bought to replace the old and worthless ones, were of the knock-down pattern and were purchased after the submission of competitive bids, the contract being awarded to the lowest bidder and competition having been previously invited from all available sources.

In March the work of collecting, preparing, and packing the material for the exhibit was begun, and the work was completed and shipment made on April 15.

Messrs. Stanley I. Slack and W. G. Brownlow left Washington for Nashville on April 17, for the purpose of unpacking the material and placing the cases in position. A few days later the representative arrived and began the installation, with the assistance of Mr. Slack, curator of the Postal Museum, to whose ingenuity, experience, and skill much of the success attained is due.

The exhibit of the Department was made, not as the display of a museum, but as an exhibition of articles illustrative of the methods and administrative faculty of the postal service in times past and present, of this and foreign countries. The exhibit occupied the entire amount of space allotted to the Department, including all the contiguous wall space. One section was occupied by a model working post-office, a sub-station of the Nashville office, under the supervision of that city's efficient postmaster, Mr. H. J. Cheney, and was interesting not only as such, but performed valuable service in the collection and distribution of the mails and proved to be a great convenience not only to the Exposition officials and exhibitors, but to thousands of visitors.

A description of the material exhibited can best be given by its classification under the various divisions, as follows:

The stamp division displayed the following:

A complete series of United States postage stamps from their introduction in 1847, including the departmental, special delivery, postage due, and newspaper and periodical stamps.

Complete sets of stamped envelopes from their introduction in 1853 to 1893.

Sets of foreign stamps, stamped envelopes, and postal cards from all stamp-issuing countries of the world.

A collection of entire sheets of postage stamps before being gummed, perforated, or cut, showing the process of manufacture.

The equipment division was represented by models of uniformed mail carriers of the United States and other countries, fully equipped with the insignia of the service of their respective governments.

A model of an Indian mail runner, with toboggan, drawn by three dogs hitched tandem, a method of carrying the mails that is sometimes resorted to in the northern frontier States during midwinter.

A model of a United States postal car, completely furnished, one-sixth the size of a sixty-foot car and containing in miniature every detail of the equipment of such a car.

A model of a German mail coach, illustrative of the rural service as it now exists in that country.

A complete collection of United States mail bags and pouches.

A collection of foreign mail bags and pouches.

A collection of postmarking stamps and locks in use in the United States from 1800 to the present time, showing the improvement in this branch of the service.

A collection of mail carriers' uniforms in use in the principal countries of the world.

A large collection of foreign equipment, including postmarking stamps, letter scales, etc.

Pictures and photographs of vehicles employed in foreign countries in the transportation of the mails.

The Dead-Letter Division exhibited a variety of misdirected letters which had passed through the Dead-Letter Office and been eventually delivered to the persons for whom they were intended. The collection fully illustrated the various steps taken by the Dead-Letter Office before the persons for whom the letters were intended could be located. It was instructive in pointing out some of the common errors which cause the failure of prompt delivery.

A large collection of articles which had found their way to the Dead-Letter Office, showing the variety of matter that passes through the mails. In this exhibit were included paintings, photographs, agricultural implements, kitchen utensils, Indian relics, wearing apparel, jewelry, trinkets of every description, books, papers, etc.

The Division of Mail Depredations exhibited a variety of articles which had been confiscated because prohibited from transmission through the mails by the postal laws, among which were deadly weapons, an explosive bomb, poisonous reptiles and insects, poisonous liquids and compounds, opium, and other articles of like character.

There were also exhibited several old mail bags which had been cut open and robbed, illustrating some of the dangers attending the transportation of the mails; as well as a number of pictures showing the "holding up" of mail coaches by road agents.

The Division of History, Records, and Statistics displayed a collection of old letters that had passed through the mails when postage was paid in money.

An exhibit of articles showing to some extent the manner of transacting postal business by foreign administrations, contributed by some of the countries constituting the Universal Postal Union.

The growth of the postal service was illustrated by a display of five old ledgers kept during the war of the Revolution by the Postmaster-General, embodying the accounts of about seventy-five postmasters—all there were at that time—in contrast with a conspicuous statistical chart, showing the magnitude of the service at the present day.

The Post-Office ledger, in his own handwriting, of Benjamin Franklin, the first Postmaster-General of the American colonies.

A report of a committee of the United States Senate, January 20, 1829, on the transportation of the mails on Sunday.

A history of the travels of a registered letter in this and other countries.

Framed statistics of the postal service of the United States.

The magnitude of the postal service of the United States as compared with France, Germany, and Great Britain.

Portraits of Benjamin Franklin, the first, and James A. Gary, the present Postmaster-General.

Portraits of the four Postmasters-General from Tennessee, as follows: Cave Johnson, under President Polk; Aaron V. Brown, under President Buchanan; David M. Key and Horace Maynard, under President Hayes.

There were also exhibited many pictures of the post-offices in the large cities, and in some instances the crude frame post-offices of fifty years ago were contrasted with the magnificent granite buildings which ornament our cities to-day.

Pictures of foreign post-offices.

On the day after the closing of the Exposition the work of packing was begun, and by November 11 the material was shipped, arriving in Washington the 22d, when the work of reinstallation in the Museum was begun and completed December 15.

The following is a statement of the expenditures made in connection with the exhibit:

Services, temporary	\$295. 00
Services, an assistant.....	850. 00
Travel	282. 65
Subsistence	955. 41
Freight	127. 37
Expressage.....	36. 00
Exhibition cases.....	608. 80
Lumber and mill work.....	76. 99
Hardware, tools, etc.....	82. 02
Glass, paints, brushes, etc.....	19. 71
Supplies and preparators' material.....	95. 89
Packing material	28. 56
Apparatus, specimens, etc	248. 92
Decorations, partitions, etc	50. 75
Office expenses	43. 94
Total	3, 802. 01

The exhibit of the Post-Office Department attracted much attention; among the articles which were most interesting to the public were the transportation models and the stamp and dead-

letter collections. The representative would respectfully suggest that it is unfortunate that the Postal Museum has so far failed in having any appropriation from Congress to improve and add to its already most interesting collection. It now contains much material which is of great interest to the public and of great value to the officials of the postal service.

This museum is one of the four postal museums of the world, the others being in Berlin, Paris, and Berne. Those of the latter cities are substantially added to each year, and it is a matter of regret that no provision has been made to enable ours, located as it is in the leading postal country of the world, both in quantity of mail matter handled and in the efficiency of the service,—to secure material which would be of great value, not only for reference by the postal authorities, but of great educational benefit to the people.

It is to be hoped that Congress may deem it worthy of substantial aid at no very distant date.

JOHN B. BROWNLOW,
Representative, Post-Office Department.



DEPARTMENT OF THE INTERIOR EXHIBITS—GENERAL VIEW.

REPORT OF THE REPRESENTATIVE OF THE DEPARTMENT OF THE INTERIOR.

The exhibits of the Department of the Interior occupied a space near the center of the Government building, with facings on the two main aisles, and adjacent to the displays of the War Department and the Department of Justice. The area assigned to it measured, approximately, 4,560 square feet of floor space, and was in the form of a rectangle 80 by 48 feet, with an L measuring 30 by 26 feet, in addition, at one side. In the main space were the areas given to the Geological Survey, the Patent Office, and the Bureau of Indian Affairs. The L was occupied by the Bureau of Education. No other Bureau of the Department was represented. On the wall side the space was lighted by five large windows, one of which was partially covered, while the other four served for the exhibition of the thirty-two large transparencies of the Geological Survey.

The work of installing the exhibits began about the middle of April, and was completed by May 15. The collections of the Geological Survey were installed under my personal supervision, with the assistance of Mr. Charles Schuchert and Mr. W. J. Yaste. Mr. J. T. Newton, assisted by Mr. W. B. Simmerman, arranged the display of the Patent Office; Mr. A. J. Standing, of the Carlisle Indian School, installed that of the Indian Bureau, and Mr. J. C. Boykin organized the exhibits of the Bureau of Education. Mr. Boykin was also designated by the Secretary of the Interior as chief special agent for the Department, and remained in general charge of the exhibits, at such times as I was absent, until the close of the Exposition.

Repacking began on November 1, and by November 20 the exhibits were all on their homeward journey.

During the month of June Mr. R. T. Hill was in charge of the display of the Geological Survey. In the Patent Office space Mr. Newton was relieved by Mr. T. H. Mitchell, who was succeeded in turn by Messrs. Ballard Morris, T. W. Wither-
spoon, C. S. Jones, J. McRoberts, and Malcolm Seaton. Colonel Seaton took charge of repacking the Patent Office collection, a duty which he had previously performed at Chicago and Atlanta.

The board of management, in allotting its funds, assigned \$12,000 to the Department of the Interior, and later a sum of \$300 was added to this for a special purpose. The total allotment, therefore, was \$12,300.¹ The expenditures, in gross, were as follows:

General Department expenses	\$1,054. 42
Patent Office exhibits	2,758. 90
Indian Bureau exhibits	725. 72
Bureau of Education exhibits	1,537. 48
Geological Survey exhibits	3,111. 44
Total	9,187. 96

The balance, \$3,112.04, was covered back into the general fund of the board.

The expenditures under the first heading, general Department expenses, were as follows:

Travel and subsistence	\$459. 92
Freight, expressage, and cartage	34. 05
Labor and services	281. 08
Decorations, partitions, and signs	102. 95
Furniture	40. 80
Miscellaneous expenses	135. 62
Total	1,054. 42

The expenditures chargeable to the several bureaus of the Department are given under the separate reports which are appended to this general statement.² The report of the Indian

¹ See statement of transfers of funds, Appendix A.

² See classified statement appended of the expenditures of the entire Department.



DEPARTMENT OF THE INTERIOR EXHIBITS—PATENT OFFICE.

Bureau is due to Miss Emily S. Cook, who took an important part in the organization of its exhibits. The report of the Geographical Survey was drafted by myself, and the two other reports are signed.

F. W. CLARKE,
Representative, Department of the Interior.

PATENT OFFICE.

In compliance with the order orally given by the Commissioner of Patents, the following report is submitted on the exhibit of the Patent Office at the Nashville Exposition:

A committee was appointed by Mr. S. T. Fisher, Assistant Commissioner of Patents, with himself as chairman, with instructions to make the educational features the dominant ones of the exhibit, while the attractive features were to be made as prominent as was possible without eliminating the educational.

A very complete collection of models, based on educational features, had been prepared for the World's Fair, held in Chicago in 1893, and of these a large number was exhibited at the Atlanta Exposition in 1895. Accordingly, it was believed that the same lines could be followed on this occasion.

The money appropriations, and the space allotted, however, caused the exhibit to be smaller than that in Atlanta, and very much smaller than that in Chicago. Hence, in reducing the number of models to comply with the new conditions, the original sequence, upon which the educational features largely depended, was in many instances broken, and consequently the original purpose of the committee could not be fully carried out.

The exhibit was contained in a number of large cases, each containing several tiers of models. Each shelf in each case, so far as was possible, was devoted to the display of some one art, and the models pertaining thereto, when practical, showed the first patented or historical instance of invention in that art, as well as successive steps along the line of improvement, until the latest device of its kind had been reached. For instance, the exhibit of sewing machines may be mentioned, although all the

arts were not shown in such detail. The first model showed the earliest crude effort to sew by machinery, the following model showing the great improvement of Howe, wherein the idea of putting the eye of the needle near the point was first embodied. This feature rendered sewing machines practical, and is the key to the art to this day. The remaining models showed various successive steps, such as buttonhole workers and machines for sewing leather.

Certain historical models were also exhibited, among which the first cotton gin, the original models of the incandescent lamp, and the first typewriter may be mentioned. The last also constituted the first of a series of typewriters, by which the successive steps in the typewriting art were illustrated.

The models in the line of electricity, firearms and ordnance, in agriculture, in pottery manufacture, in steam engineering, in printing machinery, and in many other arts not necessary to mention were numerous, but not sufficiently so to render their educational features as apparent as a larger exhibit would have permitted. The exhibit of coal-tar products was more complete, and by the aid of a so-called "genealogical tree" their relations could be fairly well studied.

The exhibit was inspected by a large number of general visitors, and I made it a point while there to engage in conversation anyone who showed a special interest in it, so as to give a better idea to the people in whose interest the Exposition was held, and also to ascertain their preferences. I was especially impressed by the fact that mechanics and others were generally interested in arts very different from those with which their daily labors were connected. No doubt such men, after spending many hours of their daily life in working and thinking on certain subjects, feel the need of a change and recreation when they visit an exposition; hence, they find things entirely different both instructive and entertaining.

Electricity in all its branches probably attracted the most attention from those who did not pursue it as a profession. Its subdivisions, those subjects which the daily newspapers so frequently mention, were the ones most inquired after. "The

inventions of Edison'' were repeatedly called for, as were those of quadruplex telegraphy, electric motors, telephones, and electric lights. It was universally asked how these various devices operated; and each time the question was put I felt the need of some system which would make apparent to the uninitiated the precise principle and mode of operation of everything shown. When I realized that the general visitor, with an interest in an exhibit, is usually one whose training has taught him but little in the particular art, it became apparent that principles and modes of operation constituted the chief attraction to him, and that they could not be made too plain. These facts were illustrated by two women school-teachers, who "did not have time" to visit the exhibit of the Bureau of Education, which adjoined that of the Patent Office, but who spent, on different days, many hours seeking information as to how a sewing machine could work a buttonhole, how a cotton gin could strip the seed of its fiber, and other questions equally remote from their profession and equally hard to make clear without special means. The same general characteristics were true of lawyers, physicians, and people generally with whom I conversed.

I was gratified at the general interest shown in the patent system as a whole, and felt the need of an exhibit which would familiarize the general public with the various facts concerning it, which at present do not seem to be clearly understood. For instance, many persons regard patents as legal instruments to secure a certain form of taxation; as instruments for taking away from the people something they already have, or of conveying the monopoly of that something to the patentee. Not a few had the idea that the office could legally grant only non-infringing patents, and the fact that it would infringe was the only legitimate grounds for the rejection of an application.

I am convinced, therefore, that the material for an exhibit by the Patent Office, on an occasion like that in Nashville, where the appropriations and space are inadequate to carry out the plan employed in connection with the World's Fair, should be selected with the main intention of attracting the public at large and of instructing them in the arts in which they have only a

casual knowledge. If this plan were to be adopted the great mass of visitors would feel rewarded for the time spent, and there would always be sufficient technical features, inherent in any invention which might be selected, to instruct and interest those whose daily life makes them experts in the art considered, provided they care to devote the time and study necessary to master the details or scientific points involved. At all events, it is desirable that the public be sufficiently attracted to make them visit an exhibit, before that exhibit can accomplish any instruction.

T. W. WITHERSPOON,
Examiner, Division 32.

COST OF PATENT OFFICE EXHIBIT.

The cost of the exhibit of the Patent Office was covered by the following items:

Travel and subsistence.....	\$1, 275. 70
Labor and services.....	411. 85
Freight and cartage.....	250. 38
Show cases.....	608. 00
Packing material.....	42. 42
Miscellaneous expenses.....	170. 55
Total	2, 758. 90

BUREAU OF EDUCATION.

The exhibit of this Bureau in Nashville was in many respects similar to that in the Atlanta Exposition in 1895, and a great deal of the same material was used.

The amount of money allotted to the Department was small and did not seem to justify radical departures. In addition, the appropriation was not available until so late in the year that it would have been impossible to collect from the schools the material for an entirely new exhibit. Nor was this necessary, for the patronage of the Nashville Exposition was drawn from a territory so entirely different from its predecessor that comparatively few people saw both.

Many of the lessons learned in Atlanta were applied in the

preparation of the latter exhibit, and the effort was made to eliminate everything that was not in itself attractive to the general public. An exposition is hardly a proper place for serious study. People attend it to receive impressions, not to pursue profound investigations. An appreciation of this fact is the first requisite of a successful exposition man.

Teachers and superintendents undoubtedly have a certain pleasure in witnessing an exhibit with the subject-matter of which they are familiar, and usually they are attracted to anything in a general collection which bears the label of "educational." But their attention can rarely be held by an exhibit that would not hold the average visitor.

In the preparation of the Nashville material, therefore, the thought of intrinsic attractiveness was continually uppermost and it led to the omission of all collections of reports such as were shown in Atlanta for the purpose of indicating the sources of information utilized in the compilation of publications of the Bureau. The statistical charts and diagrams exhibited were compiled and arranged with a view to show educational data of striking interest rather than masses of figures of value to the student only.

Since statistics and educational information are the special province of the Bureau, the first thought and the most time were given to the preparation of statistical charts. They are not the best exposition material, but they are the most representative of the Bureau's principal function.

A large chart made for wall display showed the progress of education in the South for the last twenty years. The public school system in the Southern States has had its greatest growth in that time, and the figures of the chart brought out the remarkable strides that have been made. Eighty charts were prepared and displayed in "wing frames," about half of which were devoted to statistics of education in the United States and half to education in foreign countries. Among these were several charts that were comparative in character, and showed the relative number of male and of female teachers, the relative number of elementary pupils, relative illiteracy, etc., for several countries.

Allied to the charts in general character were eight large maps of the United States upon which were shown the location of the higher educational institutions, the distribution of public school and high school attendance, of public libraries, and the percentage of illiteracy in the several States of the Union. These maps were very valuable and were constantly examined by interested visitors.

Twelve cases of photographs of typical educational institutions were shown. The institutions were classified as follows: Public schools, normal schools, seminaries for girls, academies for boys, institutions for the colored race, colleges for women, universities and colleges, agricultural and mechanical colleges, institutes of technology, and schools of medicine. In each case the institutions represented were selected to cover as wide a field as possible, and there were pictures from every State in the Union. Comparatively few photographs were included from Nashville and the vicinity, on the supposition that the schools in the neighborhood would all have exhibits of their own, and that Tennessee material in the Bureau's space would be of little interest. This proved to be an error. The few Tennessee photographs in the collection were more popular than all the rest together, and a great many visitors expressed disappointment at not seeing more of their home institutions represented. People in examining the cases would almost invariably look for scenes with which they were familiar. Profiting by this experience, while I would not confine such exhibits to local institutions, I believe that a liberal proportion of them would add to the interest of the collection and, by inducing people to "proceed from the known to the unknown," would make the whole of greater use and value.

A number of water-color pictures were shown to indicate the progress of school architecture. They were, respectively, a primitive log cabin schoolhouse, an interior of the same, a "dug-out" school of the Western plains, the "little red schoolhouse," so familiar in educational literature, a city school building of thirty years ago, and lastly, a typical modern building. These pictures, with the exception of the one last named, were made,

and well-made, by Mr. Spencer B. Nicholls, a young artist of Washington, D. C. Mr. Edward W. Donn, of the firm of Donn & Peter, architects, originated the design and drew the picture of the present-day structure.

The most apparent and conspicuous improvement pertaining to schools has been in the matter of equipment. It has been comparatively few years since the prevailing type of school-house in this country was of a very primitive character. The rural aspect of the country as a whole and the undeveloped condition of the school system tended to associate the school in the popular mind most intimately with the log cabin or the simple one-room frame structure. It is unnecessary to say that this is no longer true. The day of rustic simplicity has passed away in nearly every part of our country, and with it have disappeared those rude structures in which the schools were formerly housed. Ours is no longer a nation of farmers of the old style, and typical American life of to-day is life in cities and villages. The commonest and best known kind of schoolhouse is the commodious eight-room building so frequently seen the country over. This development was very well shown by the pictures exhibited and they attracted wide attention.

The twenty historical pictures of school punishments which were made for the Bureau's exhibit in the Atlanta Exposition by Mr. Felix Mahony were again displayed and were again an attractive and popular feature.

That part of the exhibit which related to Alaska was, during a considerable part of the summer, one of the most sought-for exhibits on the grounds. The excitement caused by the discovery of gold on the Yukon River was attended by a widespread desire to learn as much as possible of that little-known territory, and everything connected with Alaska became an object of interest. The exhibit was prepared before the gold discoveries were made and for that reason the Bureau had but little to show from the vicinity of the "diggings." At my request, however, Mr. William Hamilton, the assistant general agent of education, kindly indicated on a map the points around which most of the interest is centered and wrote me a letter

describing the region as well as the route by which it is reached. Both the map and the letter were framed and hung in a conspicuous place and were nearly always surrounded by eager visitors, as such information was not then readily accessible elsewhere.

Nearly all the material in the Alaska exhibit was furnished by Dr. Sheldon Jackson, the general agent of education, and by Mr. Hamilton. It comprised two show cases filled with curios, eighty sheets of statistics, photographs, and drawings, showing, as far as possible, the conditions of education in the Territory, together with a collection of water color paintings of Alaskan wild flowers made by Miss E. Leslie Jackson. The curios included totem poles, models of fur garments, specimens of carving, weaving and needlework, and the like. The native drawings were remarkable for the conception of perspective they displayed and for accuracy of execution, which was surprising for those whose instruction had been of the most limited and rudest sort. But few of the "artists" had attended the Government schools at all.

The flower pictures of Miss Jackson were noteworthy for their artistic excellence as well as for their botanical correctness, and were much admired. To most visitors it was surprising that there were such flowers in Alaska, and the exhibit did much to dispel the prevalent idea that Alaska is a land of perpetual snow and ice.

In the matter of installation, the changes introduced were more in the nature of improvements over old ideas than of radical innovations. The photographs of typical educational institutions were mounted on heavy cards and hung in hinged frames in neat cabinets. Since wall space was limited, these cabinets were reconstructed upon tables, six upon each, and the result was two very handsome pieces of furniture.

Between the space of the Bureau and that of the Indian Office two screens were erected—one on each side—with a sufficient space for an aisle between. The screens were 10 feet long and 8 feet high and were substantial and ornamental. The frames were of polished oak, so as to correspond with the rest of the

furniture, and the central portions were covered with burlap similar to the wall covering. They served excellently for additional hanging space for pictures.

Wing frames, hung in rows above 8-foot tables, were used for the statistical charts and for the Alaska photographs, while the maps showing the distribution of educational institutions were hung upon self-acting rollers in wall cases, so constructed as to permit the ready examination of any map.

The show cases used for the Alaska curios were like those commonly seen in shops, save that they had glass on all sides, the frames being perfectly plain and of highly polished oak. The handsome appearance of the furniture and the great number of pictures on the walls made any attempts at ornamentation for its own sake unnecessary. Four groups of Rogers's statuettes on school subjects and a large brass telescope were, however, used to good advantage on the tops of the cases.

J. C. BOYKIN,
Special Agent.

COST OF BUREAU OF EDUCATION EXHIBIT.

The expenditures on account of the Bureau of Education were as follows:

Travel and subsistence	\$811. 18
Freight and cartage.....	85. 20
Labor and services.....	46. 25
Cases and frames	269. 44
Pictures.....	125. 00
Printing and lettering.....	123. 50
Miscellaneous expenses	76. 91
Total	<hr/> 1, 537. 48

BUREAU OF INDIAN AFFAIRS.

The exhibit made by this Bureau in the Nashville Exposition differed but little from that which was presented in Atlanta. The same restrictions prevailing, namely, lack of money and

lack of space, the Bureau was unable to present anything more than its school work among Indians. Accordingly, representative schools were asked to furnish specimens of written classroom work, with maps, drawings, and articles manufactured in school sewing rooms and shops.

Eight nonreservation schools were represented in the exhibit, namely: Carlisle, Pa.; Albuquerque, N. Mex.; Carson, Nev.; Chilocco, Okla.; Flandreau, S. Dak.; Fort Shaw, Mont.; Lawrence, Kans., and Phoenix, Ariz.

Also fifteen reservation boarding schools, namely: Arapaho, Okla.; Cheyenne, Okla.; Fort Sill, Okla.; Pawnee, Okla.; Otoe, Okla.; Ponca, Okla.; Crow Creek, S. Dak.; Lower Brulé, S. Dak.; Standing Rock, N. Dak. (two schools); Eastern Cherokee, N. C.; Hoopa, Cal.; Oneida, Wis.; Puyallup, Wash., and Shoshone, Wyo.

Also day schools on the Rosebud, Pine Ridge, Pueblo, and Mission reservations.

The written work of each member of a class on a certain day was obtained and selections from these pages were bound into books, one or two from each school. The papers ranged all the way from beginnings in reading and writing English to algebra and history, with specimens of bookkeeping and shorthand from classes in commercial departments. There were also compositions, maps, free-hand drawings, and models in clay.

The kindergarten was much in evidence with its special adaptation for the teaching of children in a language other than their own.

From the sewing rooms came specimens of darning and mending, neatly made underclothes, dresses, cloaks, etc., as well as "fancy work" in the way of crocheting, knitting, fine embroidery, and drawn work. There were also shirts and collars finely laundered by Indian pupils.

As showing the industrial training given boys, the shops sent examples of joinery and blacksmith work, shoes, harness, bridles, tinware, etc., and a suggestion of farming in the way of samples of cotton, grain, and hay. A fine redwood cabinet and a model of the school band stand at Phoenix, Ariz., numerous

specimens of wood and metal working, and a covered spring wagon from the Carlisle school were especially worthy of notice. There were also models giving the full graded course of instruction in blacksmithing and carpentering from the Fort Shaw school, Montana, and a considerable amount of stoid work from different schools.

The respective schools furnished charts showing their organization, equipment, different departments, and the number of classes and grades in both literary and industrial lines.

Collections of photographs gave both the exterior and interior of many of the school plants, showing pupils at work and at play.

The charts and photographs were mounted on cards 28 inches by 22 inches and displayed in the swinging frames of 4 oak wall cases containing 28 cards each; also in the 20 swinging frames of a wing column. The latter were glazed, the former unglazed, being the same that were made for use at Atlanta.

The books of class rooms were displayed upon a sloping stand-up reading shelf fastened to the wall and having two shelves below to hold the books when not in use.

The specimens of industrial work were arranged in 3 of the 4 oak cases used in Atlanta, whose dimensions are $9\frac{1}{2}$ by 8 by 4 feet, one filled with girls' work, one with boys' work, and the other with articles of both sorts.

For decoration, Chippewa matting and Navaho blankets hung on the walls and Pueblo pottery stood on the corners of the cases, while transparencies loaned by the Geological Survey filled the windows with scenes of Indian life and surroundings.

This exhibit marks a decided advance over that in Atlanta, not only in its installation, but also in the quality of the work shown, thus giving gratifying evidence of the progress made educationally throughout the Indian service.

COST OF BUREAU OF INDIAN AFFAIRS EXHIBIT.

The subjoined expenses were incurred on account of the Indian Bureau:

Travel and subsistence	\$335. 28
Freight and cartage	154. 68
Cases and repairs to cases	44. 79
Labor and services	42. 50
Miscellaneous expenses	148. 47
Total	<u>725. 72</u>

GEOLOGICAL SURVEY.

The exhibit of the Geological Survey occupied a floor space of 48 by 26 feet, with wall space upon two sides of it. The larger wall space, to a height of nearly 12 feet, was covered by a display of geological and topographic maps, while the shorter wall space was devoted to pictures, illustrations from publications of the Survey, and relief maps of several States. Among the latter, a large map of Tennessee, 11 feet long, was the central object. It was made especially for use at this Exposition, and it showed the topography of Tennessee most admirably. A relief map of New York City and vicinity, including Staten Island and the Palisades, was also exhibited for the first time.

The floor exhibits of the Survey, because of the limited space and lack of time for preparation, were relatively small. Two large cases were shown filled with minerals from various parts of the country. These were chosen with a view to their beauty and brilliancy of effect, and included a superb series of golden calcites from Missouri. A third case contained a selected collection of fossils from the more important horizons, and a fourth case was devoted to the "Educational Series of Rocks," about 150 in number, which is a collection intended ultimately for distribution to schools and colleges. The remainder of the floor space was given to two large groups of geological and topographic models, and contained nothing new. Among them

were models of Mount Shasta; the Yosemite Valley, the Arkansas Drainage Basin, the District of Columbia, and the mountain region from Chattanooga to Atlanta.

In addition to the exhibits named above, the Survey also made a display of photographic transparencies, which formed a double tier in the four windows along the space assigned to the Department. There were 32 of these transparencies, each measuring 36 by 28 inches, and 14 of them were colored. Although these were shown as an exhibit of the Survey, they actually formed the chief decoration of the Department space, and were universally admired.

COST OF GEOLOGICAL SURVEY EXHIBIT.

The cost of the Survey exhibit was as follows:

Travel and subsistence.....	\$324. 67
Freight, expressage, and cartage.....	169. 11
Labor and services.....	142. 00
Transparencies.....	374. 10
Map and picture exhibit.....	300. 00
Minerals and fossils.....	399. 55
Geological and topographic models.....	1, 087. 00
Packing boxes and materials.....	91. 56
Railings.....	70. 20
Miscellaneous expenses.....	153. 25
Total.....	3, 111. 44

Expenditures of the Department of the Interior, Tennessee Centennial Exposition, Nashville, 1897.

Services.....	\$923. 68
Special services, printing and lettering.....	123. 50
Travel and subsistence.....	3, 206. 75
Freight, expressage, and cartage.....	693. 42
Exhibition cases, repairs to cases, furniture, frames, etc.....	963. 03
Decorations, partitions, signs, railings, etc.....	173. 15
Models, maps, minerals, fossils, transparencies, pictures, etc...	2, 285. 65
Packing material.....	133. 98
Miscellaneous expenses.....	684. 80
Total.....	9, 187. 96



DEPARTMENT OF JUSTICE EXHIBITS—GENERAL VIEW.

REPORT OF THE REPRESENTATIVE OF THE DEPARTMENT OF JUSTICE.

As the representative of the Department of Justice on the board of management, Government exhibit, at the Tennessee Centennial Exposition in Nashville, Tenn., in 1897, I have the honor to submit the following report:

The act to encourage the holding of the Tennessee Centennial Exposition in Nashville provided for the exhibition of "such articles and materials as illustrate the function and administrative faculty of the Government, tending to demonstrate the nature of our institutions and their adaptations to the wants of the people." It need hardly be said that a Department dealing mostly with questions of law, and in its administration coming but rarely in direct contact with the people of the country, can not compete in any way as an exhibitor of entertaining objects illustrating its functions with most of the other Executive Departments. An earnest effort was made by the representative, however, to collect and arrange materials for the Department exhibit in Nashville which would be interesting to the majority of citizens and as representing in the best manner possible some of the functions of a Department, which, though but a very modest factor in the Exposition, is otherwise as important as any.

The collection of portraits of the Attorneys-General, from the time of Randolph to the present, occupied most of the wall space, and was relied upon as the chief feature of attraction. These portraits of distinguished men are always interesting to visitors from different sections of the country, and their value is constantly increasing with the lapse of time.

An exhibit of blanks and forms was presented showing in

various ways the method and course of routine official business in the Department, including pardons by the Executive, etc., and was found to be interesting and attractive. Rare copies of legal text-books were also shown.

As this Department is charged with the supervision of United States prisoners and prisons, a collection of pictures and objects was secured illustrating those features. Drawings showing the plan of the proposed new United States penitentiary in Fort Leavenworth, Kans. ; photographs illustrative of the employment of prisoners in the various prisons of the country and of the prison buildings, with many specimens of the handiwork of prisoners, were exhibited, and attracted general attention. It has been found that almost everyone is entertained by matters connected with prison life. The care and treatment of prisoners, their daily life and occupations, are studied and observed not only by a large class of persons interested in penology, but by citizens generally.

The same course with regard to the installation and shipment of the Department exhibit was followed as that so successfully adopted in Atlanta. A contract was made with a reliable firm to pack and ship the entire outfit to Nashville, install it in the Government building, and to pack, reship, and replace the articles at the close of the Exposition, all of which was carried out under the personal supervision of the representative. The result proved satisfactory in every respect.

A partial list of the Department exhibits is here given.

PORTRAITS OF ATTORNEYS-GENERAL OF THE UNITED STATES.

Edmund Randolph, of Virginia, appointed the first Attorney-General of the United States by President Washington September 26, 1789. Artist, Stamey.

William Bradford, of Pennsylvania, appointed by President Washington January 8, 1794. Artist, W. E. Winner.

Charles Lee, of Virginia, appointed by President Washington December 10, 1795.

William Wirt, of Virginia, appointed by President Monroe November 13, 1817. Artist, C. B. King.

Roger B. Taney, of Maryland, appointed by President Jackson July 20, 1831.

Felix Grundy, of Tennessee, appointed by President Van Buren September, 1838. Artist, G. Dury, 1858.

John Nelson, of Maryland, appointed by President Tyler July 1, 1843. Artist, Thorp, 1872.

John Jordan Crittenden, of Kentucky, appointed by President Fillmore July 22, 1850. Artist, J. M. Stanley, 1856.

Edwin M. Stanton, of Ohio, appointed by President Buchanan December 20, 1860. Artist, F. B. Carpenter, 1865.

James Speed, of Kentucky, appointed by President Lincoln December 2, 1864. Artist, G. P. A. Healy, 1865.

Charles Devens, of Massachusetts, appointed by President Hayes March 12, 1877. Artist, Fred. P. Vinton, 1884.

Benjamin Harris Brewster, of Pennsylvania, appointed by President Arthur January 2, 1882.

Augustus H. Garland, of Arkansas, appointed by President Cleveland March 6, 1885.

William H. H. Miller, of Indiana, appointed by President Harrison March 5, 1889.

Richard Olney, of Massachusetts, appointed by President Cleveland March 6, 1893.

PHOTOGRAPHS OF ATTORNEYS-GENERAL.

Judson Harmon, of Ohio, appointed by President Cleveland June 8, 1895.

Joseph McKenna, of California, appointed by President McKinley March 4, 1897.

IMPORTANT PERIODS IN THE HISTORY OF THE UNITED STATES.

The Declaration of Independence.

The administration of the United States Government at the beginning of its second century, Washington, D. C., July 4, 1876.

The administration of the Government at the beginning of the four-hundredth anniversary of the discovery of America, Washington, D. C., October 21, 1892.

MISCELLANEOUS.

Seals of the United States and of the Departments of the United States Government.

Photographs of the associate justices and the circuit and district judges of the United States, sixth judicial circuit.

Photograph of the Supreme Court room, Washington, D. C.

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DEPARTMENTAL PUBLICATIONS AND OLD LAW BOOKS.

Opinions of Attorneys-General, twenty volumes.

Wicquefort, "L'Ambassadeur et ses Fonctions," two volumes. Cologne, 1690. This work is two hundred and seven years old.

Comyns, Sir John. A digest of the laws of England, second edition, five volumes. London, 1780.

MacNaghten, W. H. Principles and Precedents of Moohummudan Law; being a compilation of primary rules relative to the doctrine of inheritance, contracts, and miscellaneous subjects. Calcutta, 1825.

Wilkins, D., "Leges Anglo-Saxonicae," London, 1721. This volume is one hundred and seventy-seven years old, and in its original binding. The inside column of each page contains the Anglo-Saxon type, and the outside column the translation of the same into Latin.

"Corpus Juris Civilis," Beck edition, Leipsiæ, 1829; two volumes.

Blackstone, Sir William, "Commentaries on the Laws of England." First edition, five volumes. Philadelphia, 1771. The first American edition of Blackstone printed on the North American continent. A list of subscribers to this work, occupying twenty-two pages, is printed in the fourth volume.

Sheppard, W., "Actions upon the Case for Deeds." Second edition. London, 1675.

Proceedings of the convention which adopted the first constitution of Virginia, held at the capitol in Williamsburg, Va., May 6, 1776.

The first convention of Virginia, and the ordinances of the convention, held at Williamsburg, Va., May 6, 1776.

Debates of the State convention which ratified the Constitution of the United States, convened at Richmond, Va., June 2, 1788, for the purpose of deliberating on the Constitution recommended by the Grand Federal Convention, and to which is prefixed the Federal Constitution, taken in shorthand by David Robertson. Second edition.

Debates of the State convention, 1788, which did not ratify the Constitution of the United States, convened at Hillsborough, N. C., July 21, 1788.

Revisal of Laws. Newbern, 1773. A complete revisal of all the acts of the assembly of the province of North Carolina.

Journal of Convention, 1796. Reprinted 1852, held at Knoxville, Tenn., January 11, 1796. Printed by George Roulstone, Knoxville, Tenn., 1796, and reprinted by McKennie & Brown, of Nashville, Tenn., 1852. This convention adopted the first constitution of the State of Tennessee.

Tennessee, Laws of 1801.

Acts of the General Assembly of the Province of New Jersey. (1702-1776.) By Samuel Allinson. Burlington, 1776.

Acts of the Council and General Assembly of the State of New Jersey. (1776-1783.) By Peter Wilson. Trenton, 1784.

Laws of the State of New York, comprising the Constitution and the Acts of the Legislature since the Revolution, from the first to the twelfth session inclusive. (1778-1789.) By Jones and Varick. New York, 1789. Two volumes.

Laws of the State of North Carolina, published according to Act of Assembly. By James Iredell. Edenton, 1791.

Public Acts of the General Assembly of North Carolina. By Francois-Xavier Martin. Newbern, 1804. Second volume.

Laws of Maryland. By Thomas Bacon (Lord Baltimore). Annapolis, 1765. (This is a remarkably fine edition.)

Laws of Maryland. (Hanson edition.) Annapolis, 1787.

Digest of the Laws of the State of Georgia. By Marbury and Crawford. Savannah, 1802.

Laws of the Commonwealth of Pennsylvania. By Alexander J. Dallas. Philadelphia, 1793-1797. Volumes I and II.

Collection of all the acts of Assembly now in force in the Colony of Virginia. Williamsburg, printed by William Hunter, 1733.

The acts of Assembly now in force in the Colony of Virginia. Williamsburg, 1769.

Collection of all such public acts of the General Assembly and ordinances of the convention of Virginia, passed since the year 1768, as are now in force. Published under inspection of the Judges of the High Court of Chancery. Richmond, 1785.

Collection of all such acts of the General Assembly as are now in force. Richmond, 1791.

PRISONS AND PRISONERS.

Colored front elevation of new United States penitentiary, Fort Leavenworth, Kans. (Now building.)

First floor plan, new United States penitentiary, Fort Leavenworth, Kans.

Second floor plan, new United States penitentiary, Fort Leavenworth, Kans.

Exhibit of articles illustrating prison industries and specimens of skilled work by prisoners:

Manufacture of pearl buttons, Detroit House of Correction, Detroit, Mich., showing process from the rough shell to the finished work.

Embroidery by male prisoner at Illinois penitentiary, Joliet, Ill.

Four leaves painted by prisoner at United States penitentiary, Fort Leavenworth, Kans.

Articles in steel and pearl from the Ohio penitentiary, Columbus, Ohio.

Fly paper weight from Ohio penitentiary, Columbus, Ohio.

Merry-go-round ingeniously inserted in glass bottle, from Ohio penitentiary, Columbus, Ohio.

Exhibit of articles illustrating prison industries, etc.—Continued.

Wax flowers made by male prisoner, Ohio penitentiary, Columbus, Ohio.

Napkin rings of chair cane; silver teakettle made from a 10-cent piece; chains, etc., all from the Albany County penitentiary, Albany, N. Y.

Photographs showing where United States prisoners are confined, employment, etc.:

Albany County penitentiary, Albany, N. Y. Front, exterior and interior views; chapel, and shops.

United States penitentiary, McNeils Island, Washington. Cutting wood; guards; farm labor; outside view.

House of Correction, Detroit, Mich. Prisoners making pearl buttons; marching to chapel.

Ohio penitentiary, Columbus, Ohio. Prisoners marching to dinner.

United States penitentiary, Salt Lake City, Utah. Cell house; tailor shop.

New York State reformatory, Elmira, N. Y. Four interior views; three views of military drills; main buildings and cells; schools; officers, shops, etc.; gymnasium; garden, etc.

The following is a statement of expenditures made by the Department in connection with its exhibit at the Exposition:

Contract, including packing, installation, etc.	\$550. 00
Services, custodian and janitor	462. 82
Exhibition cases and frames	274. 00
Subsistence of detailed employees	185. 40
Travel of detailed employees	122. 70
Freight	92. 30
Expressage	37. 52
Articles purchased for exhibit	64. 80
Office expenses—desk, chair, and telegrams	16. 05
Lumber and millwork	6. 50
Total	1, 812. 59

FRANK STRONG,

Representative, Department of Justice.



DEPARTMENT OF AGRICULTURE' EXHIBITS—GENERAL VIEW ALONG MAIN AISLE.

REPORT OF THE REPRESENTATIVE OF THE DEPARTMENT OF AGRICULTURE.

The exhibit of the Department of Agriculture occupied a floor space of approximately 4,300 square feet in the northwest corner of the Government building, and was made up of special exhibits representing nine divisions of the Department, in the order named, as follows: On the main aisle, beginning at the west entrance, the Division of Agrostology occupied about 200 square feet of space; the Office of Fiber Investigations, 200 feet; the Division of Entomology, about 440 feet; a relief map of the State of Tennessee, about 100 feet; the Division of Pomology, about 400 feet; and the Weather Bureau, 480 feet. On the rear aisle, beginning at the west wall, the Biological Survey occupied a space of 400 feet; the Bureau of Animal Industry, 460 feet; the Division of Forestry, 460 feet; and the Division of Vegetable Physiology, 400 feet. The space north of the rear aisle, and occupied by the four last-named divisions, was very nearly equally divided into alcoves, which allowed for the construction, in two instances, of wall cases on three sides—the Bureau of Animal Industry having wall cases on two sides, the rear wall being open for uses of pictorial installation, while the Division of Forestry was installed upon the side and rear walls without cases. By this system the equivalent of a third more case space was secured, while the alcove arrangement added largely to the picturesque effect. All the cases were finished in drop black, to give the appearance of ebonized wood, the black woodwork being repeated in the cornices of partitions and in the moldings with which the wall backgrounds were trimmed. This pigment, taken in connection with the general color scheme used throughout the Government building, of

backgrounds of fabric in garnet and ecru, produced a rich and solid effect. The light from the north was supplied by four large windows, and the lower line of panes, four in each window, was filled with photographic enlargements in the form of transparencies, measuring 28 by 34 inches. The twelve lights of glass in each window above this lower line of panes were painted to resemble frosted glass, which had the effect of softening and diffusing the light. The case arrangement between the main and rear aisles was north and south, or at right angles to the principal aisles, so that the passageways between cases led the visitor into the space and made it possible to reach the alcoves beyond at any point of view. The aisles were from 3 to 6 feet wide, while the rear aisle was about 7 feet wide. Against one of the posts of the building, about the center of the space, was arranged a trophy composed of four American flags with a model of the seal of the Department, 4 feet square, as a centerpiece. The other posts in the space were covered with fabric and draped above with American flags.

The installation of the space was begun about April 25, and the building was opened to the public May 17, the period of installation occupying about three weeks. Mr. William Halley was foreman of the construction force, and also rendered valuable assistance in packing and unpacking exhibits. The general installation was under the charge of Mr. Charles Richards Dodge, while the details of the arrangement of divisional exhibits in the cases were directed by experts from the different divisions of the Department represented, who were detailed to Nashville for this purpose.

The labeling of individual specimens and of groups was uniform throughout the space. As far as uniformity was possible, four sizes and forms of cards were used, the style and sizes of the lettering being uniform on each size of card, both capitals and lower-case letters being employed; thus the same face or style of type appeared on all, whether a specimen or a group label. In some instances larger labels were used on the outside of the cases. These were, for the most part, framed under glass, and a larger body of the face or style of type used than was

employed in printing the specimen labels. The cardboard was the regulation board used by the National Museum, being buff or a light ochre in tint. By the use of colored board instead of white the general effect of an exhibit is enhanced, particularly where case interiors, whether backgrounds or floors, are decorated in similar tones, whether with paint or fabrics.

No attempt was made to separate the exhibits of the different divisions of the Department, though the various collections presented by a division to form its exhibit were always arranged together. Nor was each division specially designated, for the casual visitor is usually indifferent to such matters, while those specially interested, or students, could obtain information from the attendants in charge of the exhibits.

WEATHER BUREAU.

The exhibit of the Weather Bureau aimed to illustrate, as far as possible, the work of procuring meteorological observations and the use of the latter in the preparation and issue of forecasts. For this purpose a complete equipment of meteorological instruments was set up and maintained in operation during the period of the Exposition. This equipment consisted of apparatus by which continuous records were obtained of the velocity and direction of the wind, the duration of sunshine, temperature of the air, amount of rainfall, etc. In addition to the instruments which recorded continuously and automatically, there were also employed in some cases duplicates of these to more fully illustrate their action, and the exhibit contained copies of each of the standard instruments used in making eye observations, and the best methods of exposure of various forms were fully shown.

The observations upon which forecasts and warnings of the Bureau are based are made at the same instant of absolute time, namely, daily, at 8 o'clock in the morning and at 8 o'clock in the evening, seventy-fifth meridian time. The reports are immediately telegraphed to the central office in Washington, D. C., over a special arrangement of telegraphic circuits set apart each day at these hours for the purpose. It was impracticable to

fully present the actual operation of preparation of forecasts at the Exposition, but the attendants in charge, by the aid of copies of the daily weather maps and other suitable charts, fully explained the work to those interested.

Additional features of the exhibit consisted in various climatic and meteorological charts, prints, etc., and photographs of lightning, clouds, and the novel and peculiar kites recently employed in extending the meteorological work into observations of the upper air. This latter was fully illustrated by actual models of kites, and during the week of October 7 to 14 a special exhibit was given on the Exposition grounds, at which a full-sized kite, carrying recording instruments, was flown to a considerable height over the Exposition buildings.

The preparation of this exhibit was placed in the hands of Prof. Charles F. Marvin, of the instrument division of the Weather Bureau, who also directed its installation in Nashville.

BIOLOGICAL SURVEY.

The exhibit of the Biological Survey was arranged by Dr. A. K. Fisher and consisted of a number of groups of mammals and birds, representing, from the standpoint of agriculture, both beneficial and injurious species. It comprised also a number of characteristic Southern birds, of which the snowy egret is a conspicuous example, that have suffered so severely from the attacks of feather hunters. In order to supply the demands of the feather trade the heronries are invaded during the breeding season and the parent birds mercilessly slaughtered, while the helpless young are left to die.

Several kinds of beneficial birds were represented in their native haunts amid foliage and blossoms faithfully and artistically reproduced in wax. Among the groups of this kind were cedarbirds feeding on the larvæ and adults of the destructive elm-leaf beetle, a species which comparatively few other birds touch; a pair of cuckoos gleaning hairy caterpillars from apple boughs and blossoms; and a pair of kingbirds or "bee martins" sitting near their nest, one of the birds devouring a

destructive robber-fly. In killing a single robber-fly the king-bird saves more honeybees than would be destroyed by the bird in a long time. Three sparrow-hawks were represented on a dead tree top, devouring their favorite prey, consisting of a meadow vole and grasshoppers; and a shrike or butcherbird impaling an English sparrow on a thorny bush illustrated a common method of disposing of food not needed for immediate use.

A flock of English sparrows feeding on the tender blossoms of the peach showed the manner in which these birds destroy fruit and frequently cause considerable loss to fruit growers in the vicinity of cities and towns.

Among the mammals exhibited were groups of kangaroo rats, pouched gophers, prairie dogs, ground squirrels, and rabbits, all destructive to grain or other crops. Predaceous mammals were represented by weasels, minks, skunks, raccoons, and opossums. These animals are in the main beneficial because they destroy noxious rodents and insects, although certain of them, as the mink and opossum, become a nuisance by inroads upon poultry and eggs.

A number of enlarged photographs hung over the cases were introduced to illustrate characteristic types of vegetation or scenes from regions of special interest to the student of geographic distribution.

DIVISION OF ENTOMOLOGY.

It was the aim of this exhibit to show the insects which are injurious to crops grown in the South, together with examples of their work. The method of work was illustrated by wax models of the cotton plant, tomato, potato, clover, twigs and foliage of apple, pear, peach, plum, currant, orange, strawberry, and grape. The insects themselves were shown in cases, together with such samples of work as could readily be shown without wax models. There were, for example, 1 box of insects injurious to sugar cane and rice, 2 boxes of insects injurious to cotton, 2 boxes of insects injurious to grains, 12 boxes of insects

injurious to corn and forage plants, 8 boxes of insects injurious to truck crops, 6 boxes of insects injurious to oranges, and 15 boxes of insects injurious to other fruits.

There were also large papier-maché models of the chinch bug, silkworm of commerce, and the honeybee. In another case was exhibited a collection of substances used to destroy insects, with labels giving directions for their preparation and application. There were also bromide enlargements of photographs and figures illustrating various important insects and field operations in the control of insects. The display was prepared by Dr. L. O. Howard, chief of the division, assisted by Messrs. C. L. Marlatt and F. C. Pratt.

DIVISION OF VEGETABLE PHYSIOLOGY AND PATHOLOGY.

This division, of which Mr. B. T. Galloway is chief, and Mr. Albert F. Woods, assistant chief, seeks by investigations in the laboratory and experiments in the field to determine the cause of disease and the best means of treatment. It also studies plant physiology in its relation to pathology and its bearing on crop production in general.

The exhibit in Nashville consisted of wax models, specimens, drawings, photographs, bromide enlargements of diseased and healthy plants, maps and charts illustrating the distribution in the United States of several of the more common plant diseases, specimens and paintings illustrating the characteristics of some of the diseases and the methods of laboratory investigation and field work followed in combating them; a collection of fungicides, with the different ingredients used in their preparation, also the mixtures ready for use; photographs and bromide enlargements showing field work in treating some of the more common diseases and its results; a collection of specimens, models, and photographs illustrating some of the different species of edible and poisonous mushrooms, mushroom culture, the different kinds of beds, and the two kinds of spawn generally used, models of mushrooms as they appear in the beds, and photographs of commercial houses, the growing crop, and the mushrooms prepared ready for shipment.



DEPARTMENT OF AGRICULTURE EXHIBITS—DIVISION OF FORESTRY.

The exhibit was prepared and installed by Mr. P. H. Dorsett, under the direction of the chief of the division.

DIVISION OF FORESTRY.

The exhibit of the Division of Forestry was prepared by Mr. George P. Sudworth, under the direction of Dr. B. E. Fernow, chief of the division. It consisted of three features: Monographs of four important timber trees of the South, three farm-forestry models, and a forest botanical display of important Southern tree species.

The monographic display comprised four commercially important Southern timber species: Longleaf pine (*Pinus palustris*), red cedar (*Juniperus virginiana*), white oak (*Quercus alba*), and red gum (*Liquidambar styraciflua*). The monograph of each species consisted of a huge frame (9 by 4 feet) of flitches cut from a large trunk showing the characteristic bark of a mature tree. Within the frame, inclosed in glass, were successively arranged five panels: First, a base map of North America with a green-colored area of the geographical distribution for the species. Second, a panel giving the accepted vernacular and scientific name, followed by a full list of common and botanical synonyms, together with notes on the principal uses, appearance, and physical character of the wood. The panel also contained three photomicrographs, showing the magnified structure of the wood in a cross section, tangential, and radial section. Third, a panel containing large specimens illustrating the botanical features of the species from the germinating seedling and several successive stages of seedling growth to the mature branches with flowers and fruit. Fourth, the three commercial cuts of the lumber were exhibited in a finished panel, showing the gross structure and appearance of the tangential ("bastard"), radial ("rift"), and quarter-sawed lumber. The fifth and bottom panel included a display of rough, sawed lumber of the species, together with cross sections of sapling and mature trunks, showing the characteristic internal and external structure.

The three farm-forestry models (4 by 6 feet, mounted in

serial order on a low table) illustrated, first, a typical Southern farm with the common effects of indiscriminate forest denudation shown in wasted and badly eroded hills and other slopes, leaving but little tillable land and finally rendering the farm useless and unproductive. The second model showed the inauguration of principles of forestry applicable to the conditions of the farm looking to a restoration of dissipated soil and resources. The denuded crowns and steeper slope are replanted in forest, and the banks of streams are retained by a fringe of trees; the rush of waters is checked by damming the gullies with brush and stonework; the gentler slopes are protected by terrace and contour plowing, and by ditching and underground draining the surface water is carried off with least damage to the soil, which is gradually renewed by mulching, manuring, and thorough cultivation. The third model showed the farm regained, and illustrated a proper maintenance by preserving a forest cover on all hilltops, steep or rocky slopes, and a fringe along water courses, together with a systematic and judicious cutting of ripe and needful wood supply, but in such a manner that there shall be a natural reproduction; but if the latter fail, the spaces are to be replanted. The farm is divided and fenced with a view to using every foot of ground to the best advantage and for purposes to which each part is best adapted. Accidental washing is to be immediately corrected.

The forest botanical display was limited to 140 species of commercially important Southern timber trees, most of which are included in the forest flora of Tennessee. Each species was illustrated by herbarium-size specimens of foliage, flowers, and fruit, mounted in a glass-covered and finished box (4 by 12½ by 16½ inches) and accompanied by a small base map of North America on which the area of geographical distribution was colored green, together with a small block of wood (9 by 2 inches) radially cut from an average-sized trunk of the species. The bark was left intact and the wood smoothed so as to exhibit its characteristic appearance.

OFFICE OF FIBER INVESTIGATIONS.

This exhibit was prepared by Mr. Charles Richards Dodge, in charge of such investigations. It showed a very nearly complete collection of the commercial fibers of the United States, cultivated and imported. These were arranged in four cases, of thirty-two panels, in series, to illustrate the raw fibers and their preparation, with examples of principal manufactures. The collection comprised flax, hemp, jute, cotton, ramie, sisal and manila hems, Tampico, palmetto, cocoanut, and the principal species of brush fibers, such as Piassaba, Palmyra, and Kittool. Among the miscellaneous fibrous substances were bamboo, rattan, straw plait, raffia, Southern cane fiber, silk cottons, and woody fibers. Among novelties were corn pith cellulose used for packing bulkheads of armored vessels, Cuba bast, and willow and poplar shavings used in millinery goods.

The fibers were displayed in panel boxes, 2 by 5 feet, and a few inches deep, under plate glass, the thirty-two panels being arranged in four upright cases, painted in imitation of ebonized wood.

The flax submitted was in series, showing the straw as produced on the farm, the same retted, scutched, and hackeled, with examples of the tow product. Next followed a series of American flax samples together with an interesting series of imported flax samples, ranging in price from \$125 to \$500 a ton (scutched). The flax series was completed by examples of the yarns, and the most common forms of American manufacture, such as flax threads, twine, embroidery floss, and woven fabrics. In like manner the American and native hems were shown, with their manufactures, and ramie was exhibited from the stalks to the most delicate fabrics and lace goods that are manufactured in European factories.

All the brush fibers were shown with interesting examples of the different forms of brushes made in this country, chiefly from imported fibers. Four panels were devoted to American and imported cotton, and in one panel appeared examples of the most common uses of cotton in manufacture.

The collection in its entirety brought together not only the fibers produced in the United States, but those representing imports to the extent of nearly \$20,000,000, largely fibrous substances that could be grown within our domain.

With this exhibit was also shown a dozen bromide enlargements of well-known species of fiber plants, these occupying wall space near the fibers themselves. Several large transparencies, placed in the windows, further illustrated the work of the Office of Fiber Investigations.

While the Office of Fiber Investigations had no outdoor exhibit, it assisted the Exposition officials in getting together, near the agriculture building, an exhibit of such growing fiber plants as flax, hemp, jute, and ramie. The plot of ramie grew during the entire season, but only reached a height of about 4 feet.

DIVISION OF AGROSTOLOGY.

This exhibit consisted of a number of sheaves of grasses, principally from the prairie and Rocky Mountain regions, although there were about sixty from the South. There were also shown a number of pen drawings, originals of the illustrations used in the two volumes on "American Grasses, Illustrated," which will be used in the "Handbook of North American Grasses," now approaching completion. About one thousand species of grasses will be described and figured. There were also shown samples of a number of the cultivated forage plants, such as millets, sorghum, alfalfa, cowpeas, and soy beans, and some of the wild millets and wild beans which have shown much promise when tried in the experimental gardens of this division. This display was arranged by Prof. F. Lamson-Scribner, assisted by Mr. Jared G. Smith.

DIVISION OF POMOLOGY.

This exhibit contained about five hundred and fifty facsimile models of fruits specially adapted to cultivation in that portion of the United States which lies south of the Ohio and Potomac rivers, including the South Atlantic and Gulf States. The

larger part of the collection consisted of apples, one hundred and twenty-three varieties; pears, twenty varieties; peaches, seventy-three varieties; plums, thirty-three varieties, and oranges, forty varieties, while crab apples, quinces, nectarines, apricots, cherries, persimmons, kakis, pomeloes, lemons, mandarin oranges, strawberries, dewberries, and grapes were shown, as well as many minor tropical and subtropical fruits in the southern portions of Florida. A large collection of water-color paintings of fruits was exhibited. This was divided into two groups, one containing fruits specially adapted to the State of Tennessee, the other composed of varieties that succeed in various portions of the South. A collection of fruit descriptions illustrating the methods followed in the Division of Pomology in describing fruits was also shown. An artistic feature of the exhibit was a large water-color painting by Miss D. G. Passmore, of branches in bloom, of double-flowered varieties of almond, peach, cherry, and apple from specimens obtained from trees on the grounds of the Department of Agriculture and the parks of Washington, D. C.

The rapidly developing pineapple industry of Florida was illustrated by a series of bromide enlargements of photographs of pineapple fields, sheds, and packing houses in that State, and by a succession of fruiting pineapple plants which were shipped from Florida as required during the summer and exhibited in a glass case where favorable conditions of temperature and humidity could be maintained. The exhibit was planned and installed by Mr. William A. Taylor, under the direction of Prof. S. B. Heiges, chief of the division.

BUREAU OF ANIMAL INDUSTRY.

The display of this Bureau consisted of alcoholic preparations of the organs of domesticated animals showing the changes which take place in them as a result of the various disease processes. About one hundred specimens were exhibited, illustrating such diseases as tuberculosis, glanders, hog cholera, swine plague, actinomycosis, and contagious pleuro-pneumonia (a disease which has been completely eradicated from the

United States by this Bureau). In addition to these specimens, models of the same diseases were shown, which gave a better idea of the fresh specimen than alcoholic preparation can.

A collection of horses' hoofs showing the more common forms of disease in the feet, and also a collection of horseshoes of various patterns for the correction of such evils as this form of treatment is applicable to, attracted the attention of many persons. Each specimen was described by means of neatly printed labels.

The meat-inspection work was illustrated as far as possible by means of large bromideographs of employees of the Bureau at work attaching official tags, seals, etc., and microscopically inspecting samples of pork for the presence of the trichina worm. Samples of the various implements and tags used in the inspection of live and slaughtered cattle and hogs for interstate and export trade were exhibited.

About forty species of harmless bacteria were exhibited to show their characteristics as to pigment production, mode of growth, etc., and to aid in making a more attractive exhibit than could have been made with the comparatively few disease-producing forms, with which this Bureau deals with more particularly. The bacterial exhibit was supplemented by tubes of bacterial toxins and antitoxins isolated in the chemical laboratory of the Bureau, and by four beautiful, large, framed drawings of the more important micro-parasites. Those diseases of animals due to the presence of parasites were well illustrated by a very large collection of parasitic worms and insects.

The wool industry of the South was represented by a pyramid of wool samples exhibited in bottles and labeled to show the States in which the wool was grown. For purposes of embellishment, as well as information, numerous large photographs of famous horses and cows, and animals' horns artistically mounted, were placed at advantageous points.

The exhibit was prepared under the direction of Dr. D. E. Salmon, chief of the Bureau, by Dr. C. F. Dawson, who also superintended its installation.

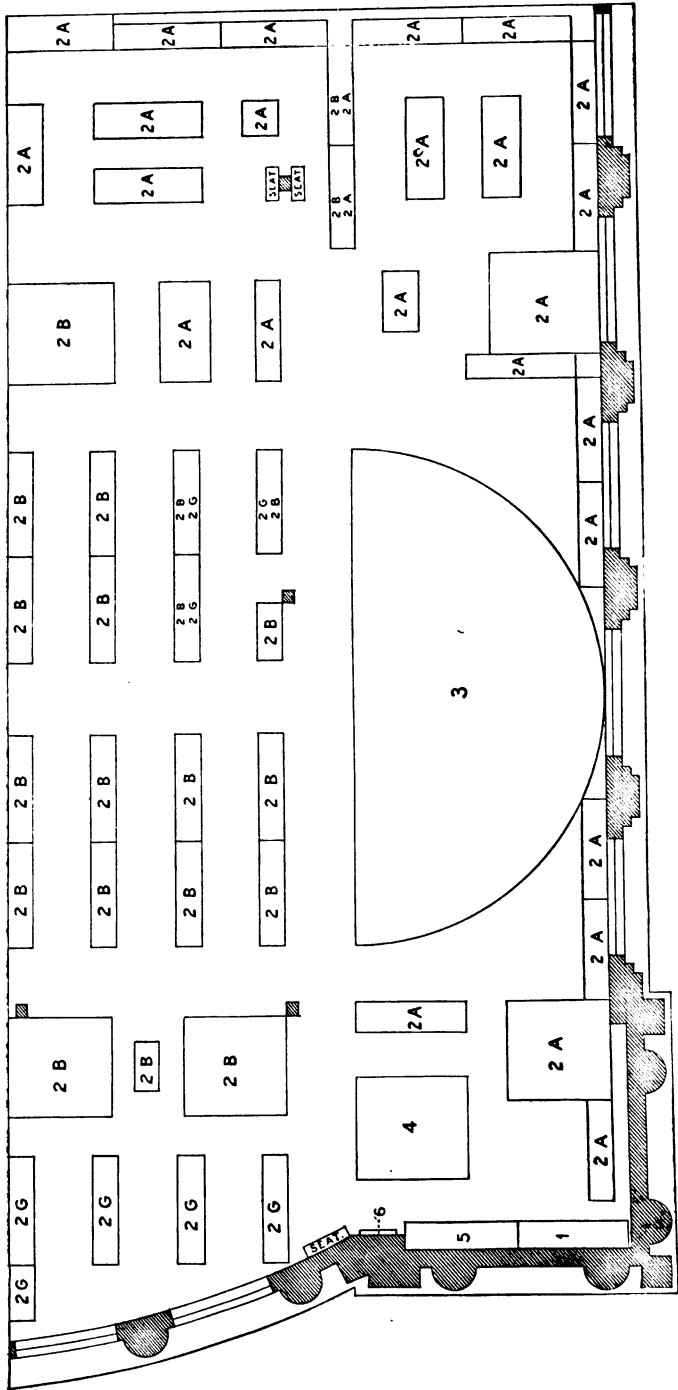
The following is a statement of the expenditures made by the Department of Agriculture for its exhibit:

Services	\$2, 608. 67
Special services, printing, drafting, painting, making blue-prints, photographic enlargements, etc.	163. 88
Travel	462. 10
Subsistence, including while traveling	1, 807. 29
Freight	334. 21
Expressage	151. 45
Cartage	76. 26
Exhibition cases, frames, office furniture, settees, etc.	1, 194. 70
Lumber and millwork	55. 56
Hardware, tools, etc	105. 12
Glass, paints, brushes, etc	74. 80
Supplies and preparators' material	70. 19
Packing material	295. 35
Apparatus, specimens, models, transparencies, photographs, etc.	1, 273. 35
Decorations, partitions, railings, etc	43. 69
Miscellaneous, office expenses, storage	192. 65
Total	8, 909. 27

CHARLES W. DABNEY,

Representative, Department of Agriculture.

H. Doc. 515—7



FLOOR PLAN OF SMITHSONIAN INSTITUTION AND NATIONAL MUSEUM EXHIBITS.
1, Smithsonian Institution; 2, National Museum; 2A, anthropology; 2B, biology; 2G, geology; 3, Bureau of American Ethnology; 4, National Zoological Park; 5, Bureau of International Exchanges; 6, Astrophysical Observatory.

REPORT OF THE REPRESENTATIVE OF THE SMITHSONIAN INSTITUTION¹ AND NATIONAL MUSEUM.

In accordance with the act of Congress, previously quoted, the secretary of the Smithsonian Institution designated Dr. Frederick W. True, executive curator of the National Museum, to act as representative of the Institution and its dependencies on the board of management of the Government exhibit, and Mr. William V. Cox, chief clerk of the National Museum, to take active charge of the exhibits at the Tennessee Centennial Exposition.

The exhibit made by the Institution was intended to convey to the minds of the visitors a clear impression of the character

¹ The Smithsonian Institution, although it bears the name of a foreigner, has for half a century been one of the most important agencies in the intellectual life of our people. It has been a rallying point for the workers in every department of scientific and educational work and the chief agency for the free exchange of books, apparatus of research, and of scientific intelligence between this and other countries. Its publications, which include more than 200 volumes, are to be found in all the important libraries in the world, and some of them, it is safe to say, on the work table of every scientific investigator. Its great library constitutes an integral and very important part of the national collection at the Capitol, and its museum is the richest in existence in many branches of the natural history and ethnology of the New World. Many wise and enlightened scholars have given their best years to its service, and some of the most eminent men of science to whom our country has given birth have passed their entire lifetime in working for its success.

The most important service, however, which the Smithsonian Institution has rendered to the nation—intangible, but none the less appreciable—has been its fifty years of constant cooperation with the Government, with public institutions, and with individuals in every enterprise, scientific or educational, which needed its advice, support, or aid from its manifold resources. (Dr. G. Brown Goode, in *An Account of the Smithsonian Institution; Its Origin, History, Objects, and Achievements*. 1895.)

and scope of the work accomplished by it and the bureaus which are under its direction. For obvious reasons the activities of the National Museum were illustrated in a more complete and realistic manner than was possible in the case of the Institution proper or in any of the other bureaus under its direction. Almost every department of the National Museum furnished an exhibit, although some of them were very much more complete than others.

The space assigned to the Institution was in the northeast corner of the Government building and comprised about 5,000 square feet. There was a frontage of 101 feet on the main aisle, running east and west, with a width of 48 feet. At the west end of the space there was a series of alcoves, but otherwise the cases were placed in rows. Two short aisles led from the main aisle, at right angles with it, their inner ends joining an aisle which ran parallel to the main thoroughfare.

Against the east wall were installed the exhibits of the Institution proper, the Bureau of International Exchanges, the National Zoological Park, and the Astrophysical Observatory.

In the center of the north hall was the exhibit of the Bureau of Ethnology. The remainder of the entire space was devoted to the collections of the National Museum.

In the windows were transparencies showing the seal of the Smithsonian Institution; the Smithsonian and National Museum buildings, with interior views of each; four views of the National Zoological Park; four geological subjects—an Australian coral reef; the Yosemite Valley; the Devil's Tower, in Wyoming; and the Mammoth Hot Springs; four zoological subjects—a deep-sea fish, a cuttlefish, a hydroid, and sea lilies; and eight ethnological subjects.

SMITHSONIAN INSTITUTION.

A complete set of the publications of the Institution, including those of the Bureau of Ethnology and the National Museum, formed one of the principal features of the exhibit. Adjoining this was an exhibit of title-pages and some of the more important illustrations in these publications.

Portraits of James Smithson, the founder of the Institution;



SMITHSONIAN INSTITUTION EXHIBITS—PORTRAITS OF SECRETARIES, EXHIBITS OF NATIONAL ZOOLOGICAL PARK, BUREAU
OF INTERNATIONAL EXCHANGES, ASTROPHYSICAL OBSERVATORY, ETC.

of Secretaries Joseph Henry, Spencer Fullerton Baird, and Samuel Pierpont Langley; and of the late George Brown Goode, assistant secretary, were hung upon the wall.

In a separate case were displayed examples of the medals awarded in 1895 to writers of essays competing for the Hodgkins Fund prizes, together with copies of the prize memoirs which had been published. The case also contained a photograph of Mr. Hodgkins, who, in 1891, bequeathed \$200,000 to the Smithsonian Institution, one-half of the amount to be applied to investigations connected with atmospheric problems.

On the wall adjacent was a cast of the memorial tablet which had recently been placed, by order of the Board of Regents, on the tomb of Smithson, in Genoa, Italy.

Two enlarged photographs of Secretary S. P. Langley's *Ærodrome* (flying machine), which twice flew over one-half mile, on May 6, 1896, near Quantico, Va., were also exhibited. The photographs were of different views of the machine and two-fifths its actual size.

BUREAU OF AMERICAN ETHNOLOGY.

The exhibit of this Bureau consisted of a miniature of one-half of a Kiowa camping circle, the material for which was collected by Mr. James Mooney, of the Bureau.

The entire display was the work of Kiowa Indians, the insignias emblazoned on the tepees and shields being executed almost without exception by those inheriting them. This aboriginal tribe is now the only representative of a distinct stock or linguistic family of primitive people.

Owing to the restricted space available, the skin tents were reduced from 16 to 18 feet in height to about $2\frac{1}{2}$ feet, while their number was reduced from about 150 (half of the 300 or more tents forming the entire circle) to 25, in addition to the ceremonial lodges of the interior.

The exhibit was prepared and installed by Mr. Mooney under the direction of Mr. W J McGee.

NATIONAL ZOOLOGICAL PARK.

This park, which is the largest of its kind in the world, is in the famous Rock Creek Valley, adjoining the city of Washington. Its extent and topography were well shown in the model exhibited, on which the buildings, roadways, and bridges, and the woods, the creek, and other natural features were faithfully represented.

In the windows along the Smithsonian section were transparencies of some of the points of interest in the park, such as the Carnivora house, the bridge, a buffalo, etc. There were also exhibited three water-color paintings and one drawing, illustrating other attractive points in the park.

BUREAU OF INTERNATIONAL EXCHANGES.

A complete set of the publications of the United States Government for one year was exhibited. Fifty similar sets are distributed annually by the Bureau to libraries throughout the world.

On the wall was a large map showing the geographical distribution of the correspondents of the institution, twenty-four thousand in number, as entered on the registers of the Bureau.

Near the map was a diagram illustrating the number of publications, including books and pamphlets, interchanged between each State and Territory in the United States and foreign countries during the ten years preceding January 1, 1896.

The exhibit was prepared by Mr. W. I. Adams.

ASTROPHYSICAL OBSERVATORY.

The exhibit of the observatory consisted of photographs of the exterior and interior of the building and of principal instruments, such as the siderostat, galvanometer, spectrometer, and water-jacketed bolometer and rheostat. Enlarged photographs of portions of the spectrum of the sun were also exhibited. With these objects was a bolometer, or electrical thermometer, of extreme delicacy, the invention of Secretary S. P. Langley.

The observatory is on the grounds south of the Smithsonian building, in Washington.



BUREAU OF AMERICAN ETHNOLOGY EXHIBIT—MODEL OF KIOWA INDIAN CAMPING CIRCLE.

NATIONAL MUSEUM.

As already stated, the exhibit of the National Museum was of far greater extent than that of any of the other Smithsonian bureaus.

Two objects were kept in mind in its organization :

(1.) To show as far as possible the extensive scope of the Museum.

(2.) To indicate the manner in which the collections are arranged, labeled, and displayed in the Museum building in Washington.

In carrying out the first idea it was necessary to exhibit a small number of objects from many different kinds of collections, which had a certain disadvantage in a space so comparatively small, as the bringing into close proximity of objects not nearly related could not be avoided. It was impracticable to show all the different classes of objects in the Museum, for lack of space.

The greater portion of labels, cases, stands, bases, backgrounds, and other fittings and furniture were from the regular stock of the Museum, although a few methods of installation entirely novel were introduced for the first time in connection with the exhibit.

DEPARTMENT OF MAMMALS.

This department exhibited in two cases an interesting order of mammals known as the lemurs—monkey-like animals—especially characteristic of the Island of Madagascar, but having representatives on the continents of Africa and Asia. The group comprised about thirty-five species, of which eighteen were shown. Especially remarkable is the aye-aye (so called from its cry), which was long a puzzle to zoologists on account of the peculiarities of its structure. The tarsiers are also very singular lemurs, notable especially for the great size of their eyes. Two species are comparatively well known, one of which (*Tarsius spectrum*) was represented in the collection.

On the walls were casts of heads of the porpoises known as mosoplodon, kogia, ziphias, and of the New Zealand whale,

neobalaena, the smallest and rarest of the true whalebone whales.

The exhibit was prepared and installed under the direction of Dr. F. W. True, by Mr. William Palmer.

DEPARTMENT OF BIRDS.

The birds were exhibited in four cases on the main aisle, one of which contained a representation of the parrot family, and the other a faunal collection from British Guiana, South America.

Parrots.—This collection comprised one hundred and twenty-four specimens, representing about one hundred species, or about one-fifth of those that are known. All the family groups were represented and the more important genera, so that the collection was a fair exhibit of the order.

Birds of Guiana.—This exhibit represented a tropical bird fauna notable for bright colors and peculiar forms. It was, of course, very incomplete, as it was impracticable to show all of the eight hundred or nine hundred species which are in Guiana.

The exhibit was prepared by Mr. Robert Ridgway, assisted by Mr. C. W. Richmond.

DEPARTMENT OF REPTILES AND BATRACHIANS.

The exhibit of this department consisted of a group of the poisonous snakes of the United States, in connection with which was shown the important illustrated memoir upon "The Poisonous Snakes of North America," by Dr. Leonard Stejneger, which had recently been published by the Museum, and a group of the fresh-water and land tortoises of North America. A cast of the head of a loggerhead turtle was also included. The specimens had been brought together from widely separated localities.

The following species were represented:

POISONOUS SNAKES OF THE UNITED STATES.

Diamond rattlesnake, *Crotalus adamanteus*, Southeastern States.

Banded rattlesnake, *Crotalus horridus*, Eastern States, south to Florida and the Mexican Gulf, west to Kansas.



NATIONAL MUSEUM EXHIBITS—GENERAL VIEW ON MAIN AISLE.

Prairie rattlesnake, *Crotalus confluentus*, Great Plains.
 Western diamond rattlesnake, *Crotalus atrox*, Southern United States, from Texas to the Gulf of California.
 Southern ground rattlesnake, *Sistrurus miliarius*, Southeastern States.
 Copperhead, *Agkistrodon contortrix*, Eastern and Southern States.
 The group of tortoises included the following species:

NORTH AMERICAN TORTOISES.

Gopher, *Gopherus polyphemus*, Florida.
 Agassiz's gopher, *Gopherus agassizii*, Arizona and southern California.
 Berlandier's gopher, *Gopherus berlandieri*, western Texas.
 Box tortoise, *Terrapene carolina*, Eastern States.
 Western box tortoise, *Terrapene ornata*, Central States.
 Blanding's tortoise, *Emydoidea blandingii*, Massachusetts to northern Illinois.
 Wood tortoise, *Clemmys marmorata*, California.
 Elegant terrapin, *Trachemys elegans*, Central and Southern States.
 Yellow-bellied terrapin, *Trachemys scripta*, Southeastern States.
 Florida terrapin, *Pseudemys floridana*, Florida.
 Neat terrapin, *Pseudemys concinna*, North Carolina to Texas.
 Red-bellied terrapin, *Pseudemys rubriventris*, Middle Atlantic States.
 Painted turtle, *Chrysemys picta*, Eastern States.
 Diamond-back terrapin, *Malaclemys centrata*, Atlantic and Gulf coasts.
 Baur's terrapin, *Graptemys pulchra*, Southeastern States.
 Snapping turtle, *Chelydra serpentina*, North America, east of the Rocky Mountains.
 Mud turtle, *Kinosteron pensilvanicum*, east of the Rocky Mountains.
 Soft-shelled turtle, *Platypeltis ferox*, Florida.

DEPARTMENT OF FISHES.

This department showed a selected series of fishes of the deep sea, which formed the basis of the comprehensive work on Oceanic Ichthyology, by the late Dr. G. Brown Goode and Dr. Tarleton H. Bean, published a few months previous to the Exposition as a special bulletin of the Museum.

The exhibit was supplemented by a small number of casts of North American fishes painted in life colors and forming part of an extensive series in the Museum.

Deep-sea fishes.—The fishes of the deep sea form a fauna distinct from that of the shallow waters of the coast. Many of the forms are extremely grotesque and are profoundly modified for



NATIONAL MUSEUM EXHIBITS—GENERAL VIEW ON MAIN AISLE.

shells of various sorts; specimens illustrating the formation of pearl in the shell—both fresh-water and marine pearl mussels deprived of their outer coating so as to show the pearly substratum; and manufactured articles such as buttons and other objects made from pearl-bearing shells, of which specimens both in the natural condition and decorticated so as to show the shelly layer and the manufactured state, were exhibited.

Byssus of the Wing-shell.—A somewhat rare curiosity was a specimen of the silky byssus of the pinna, or wing-shell, of the Mediterranean, woven by the nuns of Naples into a glove resembling silk.

In one of the windows was a transparency of a cuttlefish, *Octopus verrucosus*; and suspended from the ceiling were large casts of an octopus and a giant squid.

The selections for the exhibit were made by Mr. C. T. Simpson, under the direction of Mr. W. H. Dall.

DEPARTMENT OF INSECTS.

This display occupied one side of two cases, and was included in sixteen trays. It was, of course, very far from complete either as an exhibit of insects or as an illustration of the wealth of material in the entomological collections of the Museum.

Two different series were shown—a systematic series and a series illustrating protective and aggressive resemblance and mimicry; the imitation in form or color, or both, of objects met with in their surroundings, and the imitation in form and color of other insects.

Systematic series.—This series was included in twelve trays, and represented the more conspicuous insects of Tennessee and neighboring States, arranged according to their scientific classification. The lepidoptera were more fully represented than any other order, since the species are generally large and showy and well adapted for exhibition purposes. Six trays were devoted to this order. The modern orders, corresponding to the older order neuroptera, were exhibited in one tray, and the remaining five trays were taken up with the orders hymenoptera, coleoptera, hemiptera, diptera, and orthoptera. All of the smaller

species were omitted, as they could be studied only with the aid of a microscope or by means of illustrations.

Protective and aggressive resemblance and mimicry.—This series occupied four trays, and was divided into seven groups. It consisted of specimens illustrating the following phases of resemblance and mimicry:

(1) General protective resemblance (insects having a general resemblance to their surroundings, in color).

(2) Special protective resemblance (insects resembling special objects in their surroundings, both in form and color).

(3) General aggressive resemblance (carnivorous insects having a general resemblance to their surroundings in color, thereby enabling them to more easily approach their prey).

(4) Special aggressive resemblance (carnivorous insects resembling in form and color some special object in their surroundings).

(5) Protective mimicry (insects which, for their own protection, mimic other insects having some special means of defense—such as a sting or noxious odor—and which for that reason are avoided by birds, lizards, etc.).

(6) Aggressive mimicry (insects which resemble other insects in order to approach or cohabit with them, either preying directly upon them or as parasites upon their larvæ).

(7) Warning colors (insects which are already protected by a sting, or in some other way, but which have, in addition, some bright or conspicuous color, in order to warn insectivorous animals from attacking them).

The collection was arranged by the late Mr. Martin L. Linnell, under the direction of Dr. L. O. Howard.

DEPARTMENT OF MARINE INVERTEBRATES.

This department has to do chiefly with the many groups of invertebrate animals that inhabit seas and rivers, with the exception of mollusks, which, on account of their great variety, are placed in a separate department. The groups selected for exhibition were the echinoderms (or sea-urchins and their allies), the corals, and the sponges. A representative series of each class was shown.



NATIONAL MUSEUM EXHIBITS—DEPARTMENT OF INSECTS.

The sponges or porifera were principally from the East Indian region, and exhibited in a wide range those species which, although graceful in form, are not used for commercial purposes.

The corals were also chiefly from the Indo-Pacific. The diversity of form was the prominent feature.

The echinoderms were arranged more systematically than was found practicable with the other invertebrates of this department.

Among the transparencies in the windows were those of a sea-lily, *Pentacrinus decorus*, hydroid, *Acanthocladium huxleyi*, and an enlargement of a specimen of *Globigerina bulloides* (a species of foraminifera).

The exhibit was prepared and installed by Mr. James E. Benedict.

DEPARTMENT OF COMPARATIVE ANATOMY.

From this department two series were selected, one showing the modification of the limbs of animals for different modes of life, and another representing the structure of the human brain.

Modification of limbs.—A considerable series of specimens was exhibited, showing the general plan of the limbs in vertebrates and the special modifications by which they are adapted for walking, climbing, swimming, and flying.

The structure and development of the human brain.—The structure, proportions, and development of the human brain were illustrated by series of models showing various stages in the growth of the brain in the embryo, and, on a large scale, details of its structure in the adult. A number of diagrammatic models showed the comparative bulk of the brain of the male and female, the least amount of brain compatible with life, the proportionate amounts of gray and white matter, etc. These models were supplemented by a small series of skulls illustrating the diversity of form found in various races of man.

Crocodiles.—Above the cases was a skeleton of the gavial, or narrow-beaked crocodile of the Ganges, erroneously supposed to be a "man-eater," and a very large skull of the true man-eating crocodile, *Crocodilus forosus*.

The exhibit was prepared and arranged by Mr. F. A. Lucas.

DEPARTMENT OF PALEONTOLOGY.

This exhibit occupied one side of three cases, and was intended to show the character of the collections in the department, and the manner in which they are arranged, mounted, and labeled. Only the best preserved specimens, from which the adhering rock had been removed by careful working with tools and chemicals, were exhibited. The trilobites and crinoids were mounted on encaustic tiles, in preference to wood, paper, or slate tablets.

The groups of fossils represented were:

(1) A collection of fossil fishes from the very ancient bothriolepis to modern bony fishes, like the shad.

(2) A synoptic collection of trilobites, a group of crab-like animals, of which all forms became extinct subsequent to the coal period. This collection was prepared to show the structure, geological development, and grouping of the various forms into families and orders.

(3) A synoptic collection of fossil crinoids or "sea lilies."

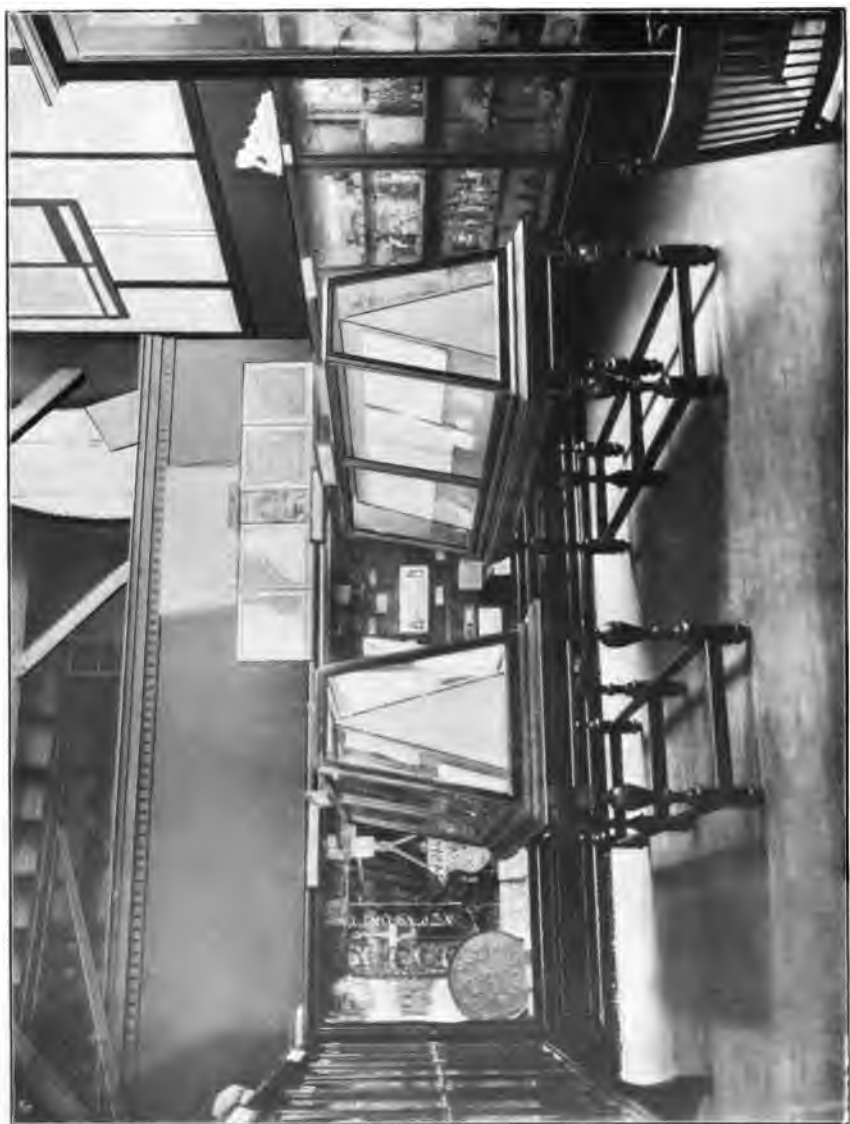
The specimens were selected and grouped by Mr. Charles Schuchert.

DEPARTMENT OF GEOLOGY.

In two cases there was exhibited a collection illustrating the occurrence and association of gold and silver in nature, thus described by Dr. George P. Merrill:

The exhibition begins with specimens showing both the native metals and their compounds in the condition of greatest natural purity. This is followed by a series of the same compounds with their characteristic associations, but in which the metal-bearing portions are still plainly evident, and this in turn by a third series showing selected types of ores as mined, but in which, as a rule, the metal or its compounds are scarcely discernible.

Attention is called to the fact that while gold, aside from its native form, enters as an essential constituent into less than half a dozen known minerals, silver occurs in upwards of six times as many. Thus gold, aside from its natural alloys with silver (electrum), bismuth and palladium, is found in chemical combination with other elements only in the minerals petzite, sylvanite, krennerite, and nagyagite. Silver, on the other hand, is found native, as an alloy with gold (electrum) or mercury (amalgam), and also as an essential element in compounds forming nearly forty mineral species more or less well defined.



NATIONAL MUSEUM EXHIBITS—SECTION OF RELIGIOUS CEREMONIALS.

Several of these compounds are very rare, and not at present included in the series exhibited.

It is further to be noted that while both gold and silver occur either as native or in compounds of such size as to be easily seen by the naked eye, the great majority of ores of either metal are composed in a large part of other substances with which the metal is so finely and intimately admixed as to be invisible and determinable only by chemical means, or where it occurs as a replaced constituent with other elements. Thus the most common form of gold ore is an auriferous pyrite, while the most common silver ore is an argentiferous galena.

In the series as exhibited, attention is called, first, to the native gold; that is, the gold found in the metallic state in nature, as displayed in the form of nuggets, leaf gold, wire gold, and gold dust from various localities; second, to the compounds of gold with silver, tellurium, antimony, and sulphur as shown, in the minerals petzite, sylvanite, krennerite, and nag-yagite; third, to the occurrence of the native metal with its associates, either as dust or nuggets in sand and gravel, or impregnating quartz, slate, calcite, and other minerals forming the characteristic gangue, and lastly, to the series of gold ores, representing the metal-bearing rocks as usually mined, and which, while, as above noted, showing no trace, on casual inspection of the precious metal, nevertheless, contain it in sufficient amount to render its extraction by chemical or mechanical means a profitable industry.

The silver-bearing series is arranged in a similar manner. It is to be noted that while gold is common in deposits of sand and gravel, as "placer gold," silver very rarely occurs in this form, and is represented here only by the silver-bearing sandstone from Washington County, Utah. Native silver in the form of "wire" or "moss" silver is, however, comparatively common, as shown in the specimens from Mexico and Saxony. Some of the silver-bearing compounds are of great beauty, as illustrated in the ruby silvers proustite and pyraryrite.

In addition to the general series, a number of casts of exceptionally large and interesting nuggets of gold and silver was arrayed in a separate case. Each cast was accompanied by a descriptive label.

In the windows were transparencies showing an Australian coral reef, and views from the Mammoth Hot Springs, the Yosemite Valley, and the Devil's Tower in Wyoming.

The specimens were selected and prepared by Dr. G. P. Merrill, and installed by Mr. W. H. Newhall.

DEPARTMENT OF MINERALS.

The exhibit of this department consisted of a series of about five hundred specimens, selected and labeled to illustrate the several properties or characters of minerals. The general plan of arrangement will be understood from the synopsis here presented.

(1) *Chemical mineralogy: Types of minerals.*—Variation in composition. Relation of water to composition. Relation of composition to physical properties.

(2) *Physical mineralogy: The crystal.*—The crystallographic axes. Crystal systems. Compound crystals. Imperfections of crystals. Crystalline aggregates. Pleomorphs. Isomorphs. Pseudomorphs (*a*), by substitution; (*b*), by deposition; (*c*), by alteration. Cleavage. Fracture. Tenacity. Hardness. Color (*a*), essential color; (*b*), nonessential color; (*c*), varieties of color. Luster. Diaphaneity. Fusibility.

Special attention was called to the order of arrangement. The several specimens illustrating the chemical and physical properties of minerals were to be studied from left to right, beginning with the upper left-hand corner and regarding each quadrant of the case as a unit.

The exhibit is thus described by Mr. Wirt Tassin, who prepared it:

Proceeding from left to right, chemical mineralogy, which treats of those properties relating to chemical composition of atomic structure of a mineral; and the chemical relations of the several kinds of minerals, is illustrated by 184 specimens. It will be observed that in accordance with certain chemical laws all minerals may be grouped under certain prominent types or classes; and further, that although the individuals included under these types are regarded as having primarily a certain definite chemical composition, this ideal condition is not always present, and the composition of any one kind of mineral may vary within wide limits. This variation may be due to certain chemical causes as shown by the labels and specimens. Finally, it will be seen that the several physical properties of minerals, such as form, hardness, density, color, etc., are functions of their chemical composition.

Physical mineralogy, which treats of those properties relating to form or molecular structure of a mineral, and the action of the various physical forces upon the several kinds of minerals, is illustrated by 315 specimens.

The distinguishing feature of a chemically homogenous body is its tendency to assume certain polyhedral forms, and this is especially characteristic of minerals. These regularly bounded solids are known as crystals, and are a consequence of the action of certain physical laws; and in accordance with these laws may be grouped under certain types or systems. The manifold character of crystalline forms, their combinations, their distortions, imperfections, irregularities, and their aggregations in various imitative shapes are also illustrated. Many minerals may also present a form characteristic, not of their own, but of some other substance. These false forms are known as pseudomorphs, and are of three kinds, substitution, deposition, and alteration. The remainder of the series consists of specimens illustrating the characters resulting from the action of the various physical forces, such as light, cohesion, mass, heat, etc.

DEPARTMENT OF ETHNOLOGY.

The ethnological exhibit consisted of two parts:

- (1) An exhibit of the home life and industries of the Eskimo.
- (2) An exhibition of the domestic life and arts of the Pueblo region.

In the first group, the most conspicuous object was a house, similar in construction to those occupied by the natives of Norton Sound.

It was prepared under the direction of Mr. E. W. Nelson and was built of logs set on end, the corner posts being the larger. Around these were placed a series of logs, growing shorter with each layer, a square smoke hole being left at the peak of the roof. The furniture of the house consisted of a bed made of driftwood, of a fireplace on the floor with a curious device for directing the draught and smoke out of the smoke hole, and a clay lamp for lighting the pipe and other like domestic purposes. In the house were the lay figures of a man and a woman in full native costume, the latter tending the fire, the former watching her movements and lighting his pipe. Around the different parts of the room were such furniture as would be found in a native hut. As the plan of this structure was given by one who had spent a long time in the country, the details were quite accurate.

Associated with this group, and mounted in separate sliding-screen cases, were shown a large number of objects connected with the life of the Eskimo.

Case No. 1, fronting the group, contained masks carved from driftwood and ornamented with feathers. These masks are used in the dramas of the Eskimo during the long winter season, when the sun has left the Arctic region. On the back of this same case were shown examples of the needlework of the Arctic tribes. They included beaded work from Greenland, exhibiting the Scandinavian influence, because for many centuries this part of the new world has been dominated by Europeans from that area; a complete suit for a man made of different furs cut in strips, which were inserted to produce various pleasing patterns; a full suit of man's clothing from Ungava, north of Labrador, made of reindeer skin, the hair being removed; a deerskin suit for winter wear, made from the skin of the caribou with the hair on.

Case No: 2 contained an exhibit of the various types of basketry on the Pacific coast of American chain and Alaska southward to the borders of the United States. In the Eskimo area of Alaska two styles of basket making are practiced—twined work and coiled work, such as found farther south. Passing farther southward to the archipelago of Alaska many types of weaving exist; namely, the plain checker in cedar barks, twilled work in spruce root, and grass, either plain or embroidered or twilled, in close work or open work.

On the northwestern boundary of the United States new types of texture come into vogue, and these were represented in the collections in this case.

In the extreme northwestern part of the United States begins that great variety of stocks or families of Indians which line the coast as far down as the Santa Barbara Islands. In each one of these families special types of weaving and basketry are to be found. One type, called the bird-cage pattern, is confined to Cape Flattery. Another type called imbricated, of great rarity, is peculiar to the Salish and Kootenai tribes of our northern boundary.

Farther south, in Oregon and California, are the beautiful grass and root baskets of the Klamath, Pomo, Hupa, Ukiah, and other tribes, rivaling in fineness the productions of any other people in the world.

The southern portion of this coast area of basketry is characterized by coiled ware rather than twilled ware. All the southern tribes make their cooking vessels and eating vessels of this peculiar stitch.

Case No. 3 was devoted to the work of the Eskimo and their neighbors in skins and other animal products, such as work-bags for women, tobacco pouches, tool bags, belts, made from the skins of seal and other animals, with or without the fur, and also from the intestines of the seal, sewed with sinew and decorated with feathers and worsted.

Case No. 4 illustrated the traveling devices of the Eskimo. Snowshoes of coarse texture used by the tribes farthest north and in out-of-the-way places, and those with footing of sinew, finely twisted and woven, similar to those in use by the Athabaskan tribes in the neighborhood, were shown; also models of boats. These exist in two types, the *kaiak*, or hunting canoe, and the *umiak*, or woman's boat, which is practically the freight boat when they are moving from place to place. There were also to be seen in this case the tools used by the Eskimo in digging in the ice and removing snow and broken ice.

On the opposite side to that in which the Eskimo material was installed was the Pueblo collection. The chief exhibit in this area was a company of Moki females grinding corn and making bread. (Case No. 5.)

The Moki inhabit a series of Pueblo, collectively called Tusayan, in northeastern Arizona.

In association with this group of breadmakers were examples of the objects used in the industrial and social life of the Tusayan and other Pueblo people. Their arts predominate in the technical life of all these Pueblo tribes; namely, their basketry, their pottery, and their weaving.

Case No. 6 was devoted to the display of the various kinds of weaving employed in the Pueblo region.

Case No. 7 contained examples of pottery from Pueblos in New Mexico and Arizona, and showed a variety of shapes, colors, and decorations in cups, bowls, vases, and animal forms. The most interesting features of these vessels are the decorations

on the surface, which are partly geometrical and are allied, doubtless, to forms in basketry and in textiles, and partly those forms which are derived from sociological and mythical motives. The ware is for use and ornament; for water carrying, for water storing, and for water boiling, and also for ceremonial and domestic purposes.

Case No. 8: On one side was exhibited (in comparison and contrast with the textile art of the Pueblo tribes) the beadwork and substitutes for textile work among tribes on the eastern side of the Rocky Mountains, including work on soft buckskin, on the surface of hard leather, on flannel and other cloths of European manufacture, and finally beadwork forming part of the textile art; that is, in which the beads are not laid on the surface of another substance, but form a part of the fabric, so that the same figure is shown on both sides, as in a piece of stained glass.

In front of this case was arranged a collection of Moki gods and dolls, and headdresses, connected with their religious services; also sacred blankets and wrappings, wands and shields, associated with the intricate and dramatic worship of these Pueblo tribes.

On the wall above these exhibits were to be seen ornamental shields of wood on which were set large collections of Eskimo and African weapons, ornamental paddles of the north Pacific coast Indians, and other decorative objects.

In addition, an ethnological exhibit installed in thirty-two unit boxes was displayed in the annex to the Woman's building. Each contained a typical example of woman's work in America, Africa, Polynesia, and a few from other regions.

These examples of woman's work related to the arts of food gathering, preparing, and serving; of clothing in its various forms derived from the vegetable and animal kingdoms, and of the furniture of the habitation. In addition to these there were exhibited the primitive ideas of women connected with form and color in decoration.

In front of these cases were three cases in which were three American Indian women in costume: (1) An Eskimo woman of Bathurst, the whole costume being made of reindeer skin,



NATIONAL MUSEUM EXHIBITS—DEPARTMENT OF PREHISTORIC ARCHAEOLOGY.

trimmed with the fur of small mammals. (2) A Kiowa woman in native costume of buckskin, colored green, and carrying on her back a cradle or papoose frame in which was shown a child securely wrapped. (3) A Piute woman from the great interior basin, gathering seeds from the wild grasses, to be subsequently ground and made into bread.

In addition to the specimens and lay figures shown, there was, in connection with the ethnological exhibit, a collection of ethnographic transparencies which aided in the understanding of the specimens in relation to their environments.

The exhibit was prepared by Dr. O. T. Mason, and installed by Mr. T. W. Sweeney.

DEPARTMENT OF PREHISTORIC ANTHROPOLOGY.

The exhibit of this department was confined to a display of prehistoric objects from foreign countries. This restriction in the scope of the exhibit was made in the belief that the weapons, implements, and ornaments found in the Tennessee Valley and other sections of the United States would be amply illustrated in the various local exhibits of prehistoric objects.

The Paleolithic period was represented by specimens from a large portion of the Eastern Hemisphere—England, France, Spain, Italy, Egypt, Hindustan, and other countries.

The Neolithic period was represented by different implements, principally of polished stone, from great areas, some of which were divided according to function.

Nuclei or cores, flakes and hammer stones, polished stone hatchets, scrapers, arrow and spear heads, and similar implements were shown to be world-wide. Special attention was called to the similarity of the polished stone hatchets from distant and widely separated countries throughout the world.

An entire case was devoted to a display of objects belonging to the Bronze age. These began with the most primitive implements, as the plain hatchets, and ultimately included many other weapons, implements, utensils, and ornaments of later date. Among these were hatchets, swords, daggers, knives, sickles, fishhooks, household utensils, mirrors, combs, thimbles, brace-

lets, fibulas, rings, pins, objects, and ornaments of dress and for the boudoir.

The collection was selected and arranged by Dr. Thomas Wilson.

DEPARTMENT OF ORIENTAL ANTIQUITIES AND RELIGIOUS
CEREMONIALS.

The exhibit of this department consisted of objects intended to illustrate Brahmanism and Buddhism, the principal religions of eastern Asia, Mohammedanism, the literary history of the Bible, and the religious ceremonials of the Jews.

Brahmanism, which is the religion of the vast millions of India, was represented by a collection of images of the principal divinities and by various implements and paraphernalia illustrative of the religious worship, the ascetic life of devotees, and the institution of caste, which plays such an important part in the religious and social life of India.

Buddhism, which exercises considerable influence over a very large proportion of the inhabitants of Asia, from Ceylon to Japan, was represented by several images of Buddha, its founder, and of Buddhist saints, and by a collection of musical instruments and other objects used by the Buddhists in their religious worship.

The history of the Bible as a book was illustrated by a collection of Bibles, which included manuscripts and old and rare editions of the original texts, as well as of the most important ancient and modern translations of the Scripture. The collection thus afforded an interest not only to Biblical knowledge, but also to the study of paleography and literary history.

The Jewish religious ceremonials were represented by a collection of modern objects used by the Jews in their religious rites, which have their origin in and are based upon Biblical ordinances.

The exhibit was prepared and installed by Dr. I. M. Casanowicz, under the direction of Dr. Cyrus Adler.

SECTION OF TECHNOLOGICAL COLLECTIONS.

Owing to the geographical location of Nashville, it was thought that a presentation of some of the early methods of transportation in the Southern States might be of special interest.

A small series of models was selected to show the development in transportation from its beginning in colonial days, when the sledge was almost the only method of locomotion, to the introduction of the first railroad train in the Southern United States, which ran on the South Carolina Railroad in 1831.

A rigged model of the *Savannah*, the first steamship to cross the Atlantic Ocean, was also included in this exhibit. The *Savannah* sailed from the city of that name, one of the most important ports in the Southern States, in the year 1819.

From the section of naval architecture was selected a model of a full-rigged ship. A birch-bark canoe from California was included in this exhibit. In order to make plain to the visitors the nomenclature of the ropes, spars, sails, etc., over four hundred labels were attached to as many different parts of the model.

From the electrical collection was sent a series representing the early instruments of Franklin, Henry, Morse, Vail, and Page, and illustrating the development of the motor and telegraph from the beginnings of knowledge concerning static electricity to the more recent discoveries in electro-magnetism. A full-sized model of the large electro-magnet, which was constructed in 1831 for Yale College by Joseph Henry (the first Secretary of the Smithsonian Institution), was placed on the case containing the electrical collection.

The selections for the exhibit were made by Mr. J. E. Watkins.

SECTION OF HISTORICAL RELICS, COINS, AND MEDALS.

The collection of coins and medals was exhibited in two table cases and included:

(1) The principal coins in use in the North American colonies from 1625 to the establishment of the United States Mint in 1793, and types of the later coinage of the country.

(2) Medals commemorative of events in the colonial history of the country during the war of the Revolution and the war of 1812.

(3) Medallic portraits of the Presidents of the United States. Among the most interesting coins shown were the "Pine and

Oak Tree" shillings of 1652, the "Mark Newby" penny, the "Rosa Americana" penny, the Continental dollar of 1776, and the copper coins of Massachusetts, Vermont, Connecticut, New Jersey, and other colonies, prior to coinage by the mint.

There were also shown specimens of the North Carolina and Georgia private gold coinage of 1830 to 1840, of the Mormon gold coins of 1849, and some shell money, or "wampum," which was given a legal value in New England in 1637.

A spinning wheel and distaff, which was used during the period of the war of the Revolution, was exhibited in the history building.

This spinning wheel was presented to the Society of the Daughters of the American Revolution by the late Dr. G. Brown Goode, and afterwards deposited in the National Museum. It was incorporated by Dr. Goode in his design for the badge of that society.

The collection was selected and arranged by Mr. A. Howard Clark.

SECTION OF MATERIA MEDICA.

Two series of specimens were sent from the extensive collection in the section of materia medica, the first consisting of samples of natural and cultivated cinchona barks, and their products, and the second showing the commercial varieties and the alkaloids of opium.

The exhibit was prepared by Dr. J. M. Flint, U. S. N.

DEPARTMENT OF ARTS AND INDUSTRIES.

This department exhibited an attractive collection representing animal form in pottery, including the principal wares of Japan, and selections from Prussian Saxony, Copenhagen, Denmark, and Galle, France.

Exhibit of laces.—A collection of specimens of network and embroidery, illustrating the various epochs of lace making, was exhibited in the annex to the Woman's building by Dr. Thomas Wilson, curator of the department of prehistoric anthropology in the museum.

The collection comprised about one thousand specimens, and may be classified under the following general divisions:

(1) Prehistoric: implements for, and specimens of, sewing, weaving, embroidery, and tapestry making.

(2) Prior to 1550, A. D., anterior to lace making: knotted net, darned work, drawn work, cut work.

(3) From 1550, A. D.: reticella, point coupé, point lace and bobbin lace of Venice, Milan, Genoa, Flanders, France, and England.

(4) Modern laces.

(5) Series showing process of manufacture of point and bobbin lace, needles, thread, cushions, bobbins, etc.

Credit is due to Mr. S. C. Brown, Mr. J. S. Goldsmith, and Mr. C. A. Steuart for efficient aid rendered in the preparation and installation of the exhibits.

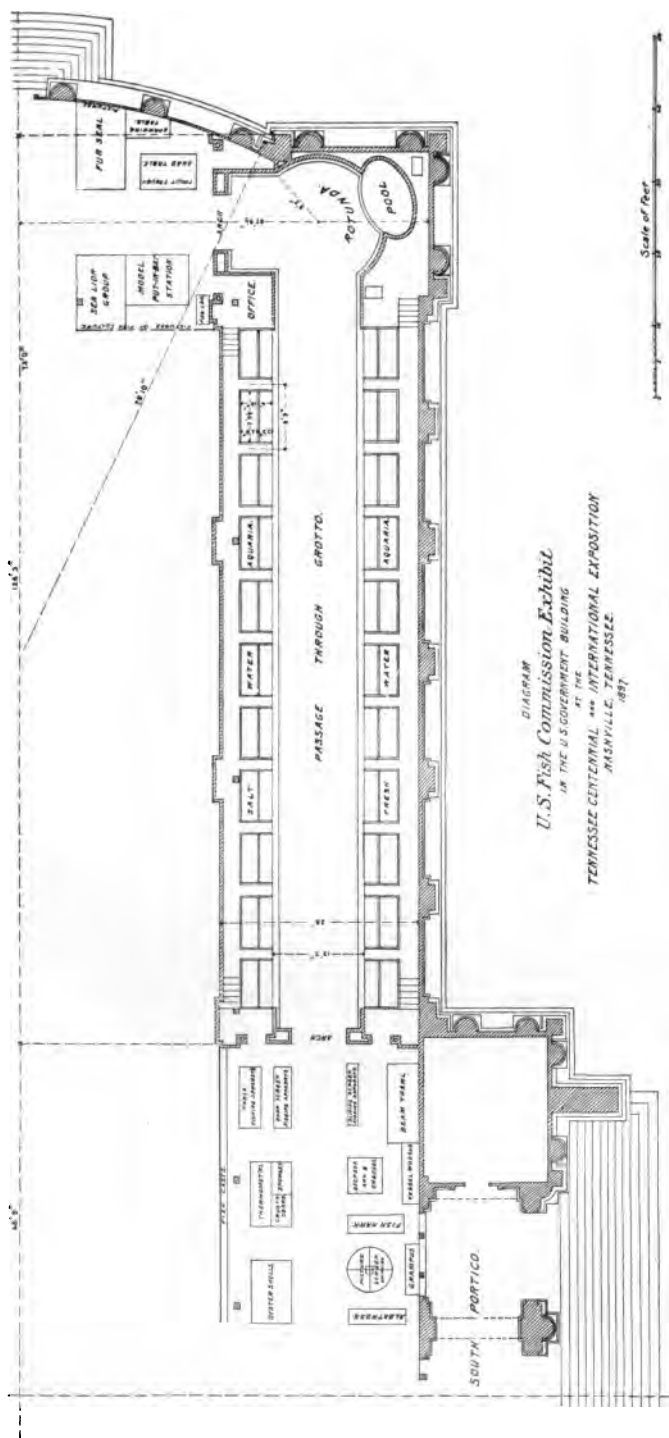
The sum allotted to the institution and museum was \$16,200,¹ and the actual cost of making the exhibit was \$16,073.61, as shown by the following statement of classified expenditures:

Services.....	\$7, 225. 17
Expert services in preparation and repair of models, transparencies, charts, specimens, etc.....	888. 95
Travel.....	1, 015. 26
Subsistence.....	803. 30
Freight.....	738. 19
Cartage and freight handling.....	77. 18
Expressage.....	168. 35
Exhibition cases, frames, etc.....	314. 00
Lumber and mill work.....	673. 55
Hardware, tools, etc.....	124. 89
Glass, paints, brushes, etc.....	1, 320. 99
Supplies, preparators' material, etc.....	301. 50
Packing material.....	163. 40
Apparatus, specimens, etc.....	2, 157. 75
Decoration, flags, etc.....	66. 25
Office expenses.....	34. 88
Total.....	16, 073. 61

FREDERICK W. TRUE,

Representative, Smithsonian Institution and National Museum.

¹ See statement of transfers of funds, Appendix A.



REPORT OF THE REPRESENTATIVE OF THE COMMISSION OF FISH AND FISHERIES.

Under the act of Congress approved December 22, 1896, providing for the participation of the Commission of Fish and Fisheries in the Tennessee Centennial Exposition in Nashville, Tenn., for the purpose of illustrating its functions, the Commissioner appointed Mr. W. de C. Ravenel, assistant in charge of the division of fish culture, as the representative of the Commission on the Government board of management.

The plan of this exhibit, as approved by the Commissioner, was as follows: (1) Scientific investigations of the Commission, to be illustrated by models of the vessels belonging to the Commission of Fish and Fisheries, with full-sized forms of the apparatus used, and by illustrations showing the work of these vessels; by collections of marine animals, and by casts of colored fishes, drawn from life, and by collections of sponges, corals, oysters, and other shellfish. (2) The fish-cultural operations, to be shown by models and photographs of important hatching stations; models and full-sized specimens of apparatus used in the collection, transportation, and hatching of eggs, and the distribution of fish; charts showing the work done by the Commission since its organization, and results with reference to special fisheries; also, by the hatching of the eggs of the various species of the salmonidæ and shad. (2a) An aquarium for showing the important food and game fishes reared by the Commission at its various stations, together with other important fishes of the Ohio Valley, and the principal species taken in the South Atlantic Ocean and Gulf of Mexico. (3) Method and statistics of the fisheries, to be illustrated by models of vessels used in the important fisheries of the South Atlantic and Gulf States; models of boats, and the common forms of fishing apparatus,

such as pounds, weirs, seines, trawl lines, and hand lines; also, oyster and clam rakes, tongs, hooks for sponges, etc., besides illustrations of the various fisheries by means of photographs, oil paintings, and etchings.

A soon as possible after the organization of the board of management and the allotment of space and funds preparations were begun for the construction of the aquarium and the collection of the material comprising the exhibit. The Commission was allotted \$15,500 and 5,200 square feet of floor space in the southeast corner of the building. The space was L-shaped, and extended from the main aisle at the east entrance to the intersecting main aisle at the south entrance. By May 17, when the Government building was opened to the public, the exhibit was installed and ready for inspection and the aquarium stocked with both fresh and salt water fishes; the hatchery was in operation, illustrating the methods employed in the hatching of eggs of the shad and trout.

Practical fish culture.—During the months of May and June three and one-half million shad eggs were received from the Susquehanna, Delaware, and Potomac rivers by express. Of the fry resulting, 1,400,000 were liberated in the Cumberland River, and 215,000 were held until July for exhibit. Besides the black-spotted and rainbow-trout eggs from Colorado, received in June, 20,000 eggs of the quinnat salmon were shipped from California during the autumn. These eggs were hatched in water from the artesian well, and the fry were placed on exhibition and planted in suitable waters in the vicinity.

The accompanying diagram shows the arrangement of exhibits and the amount of space occupied by the various forms. Of the total allotment of 5,200 feet the aquarium occupied 3,360 feet; the exhibits illustrating fish-cultural work, scientific inquiry, and methods and statistics of the fisheries the remaining 1,640 feet. The articles exhibited are comprised in the following list:

SCIENTIFIC INQUIRY SECTION.

Exploring vessels:

Models.—Steamer *Albatross*, steamer *Fishhawk*, schooner *Grampus*.

Illustrations.—Forward deck of steamer *Albatross*, steamer *Albatross*.

Collecting apparatus:

Seines and nets.—Two Baird seines (50 and 150 feet long), 1 herring seine, 1 herring gill net, 2 minnow seines, 2 small seines, 2 beam trawls (1 large, double, and 1 small model), 2 small gauze towing nets.

Dredges.—One naturalist's boat dredge, 1 naturalist's deep-sea dredge, 2 surface tow nets, 1 dip net, 1 Chester rake dredge (2 nets), 2 oyster dredges.

Tangles.—One tangle.

Accessories for dredging and trawling:

Sounding wire.—One piece of sounding wire (large size), 1 piece of sounding wire (common size), 3 splices in sounding wire, 2 splices in dredge rope.

Apparatus for preserving collections: One tank box containing one 16-gallon copper tank for storage and transportation of natural-history specimens, 1 tank box containing one 8-gallon and two 4-gallon copper tanks for storage and transportation of natural-history specimens, 5 jars (assorted sizes), 7 glass bottles with cork stoppers (assorted sizes), 11 homeopathic vials with rubber stoppers (assorted sizes), 4 glass dishes (assorted sizes), 3 German silver naturalist's forceps.

Apparatus for deep-sea sounding: 1 Tanner deep-sea sounding machine, complete, with Sigsbee sounder (shot attached) and deep-sea thermometer.

Apparatus for physical observations:

Thermometers and accessories: Three deck thermometers, 1 Miller-Casella deep-sea thermometer, 1 Baird protected thermometer, 1 Negretti and Zambra deep-sea thermometer, 3 wooden cases for deep-sea thermometers (experimental forms), 1 metal frame for holding deep-sea thermometer (Negretti and Zambra case), 11 brass cases (experimental forms) for deep-sea thermometers, with attachments, 1 Magnahi case for deep-sea thermometer, 2 Tanner improved metal cases (sixth form, ordinary size) for deep-sea thermometers, 2 Tanner improved metal cases (sixth form, large size) for deep-sea thermometers, 1 water bottle for deep-sea investigations, 1 reading glass for Negretti and Zambra thermometer, 1 set of Hilgard's salinometers with cup and thermometer, 1 magnet.

Results of explorations:

Collections (marine animals, dry)—

Crustaceans—One lobster (*Homarus americanus*), 1 *Echinocerus setimanus*, 1 deep-sea crab (*Geryou quinquedens* Smith), 1 *Echinocerus foraminatus*, 1 common edible crab (*Cancer magister* Dana), 1 *Mithrax hespidus*, 3 *Othinia anisodon* (young), 1 *Othinia anisodon* (adult), 2 mantis shrimp (*Squilla empusa*), 1 spider crab (*Libinia emarginata*), 1 box crab (*Calappa flamea*), 1 great spider crab (*Lithodes maia*), 1 crayfish nest or chimney.

Results of explorations—Continued.

Collections (marine animals, dry)—Continued.

Sponges—Sheepswool, velvet, yellow, glove, and grass.

American ornamental corals—One piece of star coral, 1 piece of *Oculina diffusa* coral, 2 pieces of fungus coral (*Agaricia agurcites*), 1 piece of brain coral (*Manicinia areolata*), 1 piece of musa coral, 1 piece of star coral (*Orarcella*).

Mollusks—

Oyster and other shells—

Oyster spat, two to three weeks old.

Oyster spat, three to four weeks old.

Oyster spat, one to two months old.

Oyster spat, two to three months old.

Oyster spat, two to three months old, hard bottom.

Oyster spat, two months old, soft bottom.

Oysters, one year old, hard bottom.

Oysters, two years old, hard bottom.

Oysters, three years old, hard bottom.

Oysters, four years old, hard bottom.

Oysters, one year old, soft bottom.

Oysters, two years old, soft bottom.

Oysters, three years old, soft bottom.

Oysters, four years old, soft bottom.

Oysters, five years old, soft bottom.

Oysters, five years old, hard bottom.

Oysters, six years old, hard bottom.

Oysters, six years old, soft bottom.

Oysters, large, mud bottom.

Oysters, large, 16 years old, soft bottom.

Oysters, large, 12 years old, hard bottom.

Blue Point oysters.

Oyster shells, greatly thickened, due to stunted growth at margin.

Glenwood oysters.

Shinnecock Bay oysters.

Rockaway oysters.

Shrewsbury oysters.

Rappahannock River oysters.

James River (near Newport News, Va.) oysters.

Saddlerock oysters.

East River oysters.

Oysters from Hampton, Va., 18 months old.

Oysters from Tangier Sound, Maryland and Virginia.

Oysters from Chincoteague, Va. (first grade).

Oysters from Chincoteague, Va. (poorer grade).



COMMISSION OF FISH AND FISHERIES EXHIBITS—WEST ENTRANCE TO AQUARIUM.

Results of explorations—Continued.

Collections (marine animals, dry)—Continued.

Mollusks—Continued.

Oyster and other shells—Continued.

Oysters from bottom of scow, Port Royal, S. C., less than one year old.

Planted oysters from creeks north of Winyah Bay, South Carolina.

Oysters from Troups Creek, near Brunswick, Ga.

Raccoon oysters from Cattle Wharf, Charlotte Harbor, Florida.

Oysters from Rocky Point Bed, Tampa Bay, Florida, showing inclusions of mud on inner surface.

Oysters from Catfish Point Oyster Bar, Hillsborough Bay, Florida, (source of supply for Tampa).

Oysters from Little Sarasota Bay, Florida (a fine grade of oysters, showing inclusions of mud on inner surface).

Oysters from Cape Hayes oyster bed, Charlotte Harbor, Florida (important ground, but not much worked until 1888).

Raccoon oysters from mouth of Crooked River, Carra-belle, Fla.

Oysters from Indian Point Bar, Florida (extra large, showing inclusions of mud on inner surface).

Oysters from Cat Point Bar, Apalachicola Bay, Florida, showing inclusions of mud on inner surface.

Oysters from St. Marks River, Florida.

Oysters from Cedar Key, Fla. (the average size of those sent to market, showing inclusions of mud on inner surface).

Oysters from St. Vincent, Fla.

Oysters from Watsons Bayou, east arm of St. Andrews Bay, Florida.

Oysters from Porters Bar, St. George Sound, Florida.

Oysters from Sylvias Bay, St. George Sound, Florida.

Oysters from Dog Lake, Florida.

Planted oysters, one year old, from Escambia Bay, Florida.

Jack Stout oysters, Louisiana.

Oysters from Calcasieu Pass, Louisiana.

Oysters from Matagorda Bay, Texas, average size.

Young oysters from planted beds, Galveston Bay, Texas.

“Saddle Rocks” of Texas, Cedar Bayou, Texas (125 will often fill a barrel).

Results of explorations—Continued.

Collections (marine animals, dry)—Continued.

Mollusks—Continued.

Oyster and other shells—Continued.

Ostrea herida, growing on shells of *Ostrea virginica* in San Francisco Bay. The native oysters tend to cause much damage in this way.

Ostrea virginica. Natural growth derived from oysters planted in San Francisco Bay.

Ostrea virginica. Transplanted from Atlantic coast to San Francisco Bay and then raised for market.

Ostrea virginica, Guaymas, west coast of Mexico. Used as food.

Ostrea herida, Pacific coast of United States. Used as food.

Ostrea virginica, Guaymas, Mexico. Formerly shipped to San Francisco market.

Ostrea herida. The native oyster of Pacific coast of United States. From Willapa Bay, Washington.

Ostrea herida. The native oyster of Pacific coast of United States. From San Francisco Bay, California.

Oyster growing on twig of tree.

Sheet of rubber containing oyster spat.

Rubber shoe with young oyster attached. Connecticut.

Anchor lantern with oysters growing on it.

Earthenware ink bottle with oysters growing on it.

Glass bottle with oysters growing on it.

One-year-old oysters growing on gutta-percha cable across Housatonic River at Stratford, Conn.

Spat about two months old attached to crushed stone off Norwalk, Conn.

Jingle clutch. Used on planted beds for collecting oyster spat. Composed of the shells of *anomia* and other light mollusks, and very highly regarded under some conditions.

Oyster spat growing on child's leather shoe.

Crushed stone. Used on planted beds for collecting oyster spat. Recent innovation.

Enemies of the oyster :

Starfish attacking oysters.

Starfish.

Egg cases of the periwinkles (*Fulgargarica* and *Sycotypus canalicalatus*).

Asterias forbesii and small specimens clustered in shell of periwinkle. Off Norwalk, Conn.

Results of explorations—Continued.

Collections (marine animals, dry)—Continued.

Mollusks—Continued.

Oyster and other shells—Continued.

Enemies of the oyster—Continued.

Starfish feeding on common mussels (*Mytilus edulis*).

Providence, R. I.

Periwinkle (*Sycotypus canaliculatus*). Massachusetts to Gulf of Mexico. Destructive to oysters.

Asterias forbesii. Medium specimen in shell of periwinkle. Connecticut.

Sea snail (*Neverita duplicata*). Massachusetts to Gulf of Mexico.

Drills (*Purpura lapillus*).

Oyster shells showing the effect of the boring sponge (*Clione sulphurea*). Tangier Sound, Virginia.

Drills (*Urosalpinx cinerea*). Massachusetts to Gulf of Mexico. Also introduced with oysters in San Francisco Bay, California.

Razor fish.

Flat razor clams (*Machæra patula*). Alaska to California. Used as food.

Giant clams (*Schizothærus nuttallii*). Pacific coast of North America. Used as food along New England coast. Arctic Ocean to South Carolina.

Long clam—soft clam (*Mya arenaria*). Europe. Also introduced on Pacific coast of United States. Used as food and bait.

Large clams.

Quahog—round clam (*Venus mercenaria*). Gulf of St. Lawrence to Gulf of Mexico. Used as food and bait.

Clams (*Macra planulata*). Alaska. Used as food.

Sea clam—surf clam (*Macra solidissima*). Labrador to Gulf of Mexico. Used as food and bait.

Bloody clams (*Argina pexata*). Massachusetts to Gulf of Mexico. Occasionally used as bait.

Little-neck clams—hard-shelled clam—carpet shell (*Tapes staminea*). Alaska to California. Extensively used as food.

Little-neck clams (*Saxidomus aratus*). Esteemed as food. San Diego, Cal., Hemphill.

Round clams (*Saxidomus nuttallii*). Pacific coast of North America. Used as food.

Cockle (*Cardium corbis*). Pacific coast of North America. Edible.

Results of explorations—Continued.

Collections (marine animals, dry)—Continued.

Mollusks—Continued.

Oyster and other shells—Continued.

Horse mussel (*Modiola modiolus*). Greenland to New Jersey. Europe. North Pacific Ocean. Used as food and bait.

California mussel (*Mytilus californianus*). Pacific coast of North America. Used as food.

Other economic mollusks:

Haliotis, Swain. California.

Pearl oyster (*Meleagrina margaritifera*). Gulf of California.

Giant scallop (*Pecten tennicostatus*). Labrador to New Jersey. Used as food.

Common scallop (*Pecten irradians*). Massachusetts to Gulf of Mexico. Used as food.

DIVISION OF FISH CULTURE.

Transportation apparatus:

Model of Commission of Fish and Fisheries car No. 1.

Hatching apparatus--

Working models—One whitefish table 8 feet long, 3 feet wide, and 3 feet high, with McDonald hatching jars for hatching shad eggs; 2 hatching troughs 8 feet long, 12 inches wide, and 8 inches deep, equipped for hatching salmon and trout eggs.

Accessories—One egg scale, 2 funnels for shad, 1 pan for washing eggs, 2 siphon bags, 2 siphon cages, 1 aquarium.

Hatching and rearing establishments:

Model of Commission of Fish and Fisheries hatchery in Put in Bay, Ohio.

Illustrations of hatching stations, showing buildings, interior and exterior, methods employed in collecting, hatching, rearing, and distributing fish, fry, and eggs—

Commission of Fish and Fisheries hatching station, Wytheville, Va., 1885:

Interior of hatchery. Men at work.

View of spring and ponds, looking west.

View of ponds, looking south.

View of ponds, looking southeast.

Launch towing spawn takers.

Stripping shad on fishing float.

Packing shad eggs.

Shipping fry.



COMMISSION OF FISH AND FISHERIES—EXHIBITS AT WEST ENTRANCE TO AQUARIUM.

Hatching and rearing establishments—Continued.

Illustrations of hatching stations, etc.—Continued.

Commission of Fish and Fisheries shad station, Havre de Grace,
Md., 1892:

Bird's-eye view of station.

Superintendent's cottage.

Hatching house, looking northeast.

Interior of hatching house.

Commission of Fish and Fisheries hatching station, Wytheville,
Va:

View of station, looking north.

View of station, looking south.

Floating stations—Steamer *Fish Hawk*.

Methods and results of fish-culture:

Models—One lay figure, illustrating method of taking salmon eggs.

Charts—One chart giving names and locations of stations and output
of each for the fiscal year 1894-95; 1 chart showing effect of fish-
culture on the shad fishery.

Objects of the fisheries:

Mammals—

Cetaceans—

Dolphins: Blackfish (cast) head. Grampus (cast) head. Bot-
tle-nose porpoise (cast). Harbor porpoise (cast) young.
Sawfish (cast).

Carnivores—

Northern fur seals (mounted group).

Stellar's sea lions (mounted group).

Batrachians—

Frogs—Bullfrog (cast). Green frog (cast). Pickerel frog
(cast).

Fishes—Casts of 150 species of marine and fresh-water food
fishes.

Drawings and notes—Five swinging screens containing drawings of,
and notes on, the important fishes of the Southern States.

Live fishes—Living marine and fresh-water fishes in aquaria.

Invertebrates—Living crabs, mollusks, etc., in aquaria.

Fishery apparatus:

Vessels—

Series of models showing the development of fishing vessels from
the settlement of America to the present time.

Models of vessels used in the important fisheries of the South
Atlantic and Gulf States.

Nets—Three pound nets, 1 cast net, 1 whitefish gill net, 4 fyke nets,
1 dip net, 1 aboriginal fish weir, 2 herring weirs.

Traps and pots—Six eel pots, 4 models, lobster pots, 1 eel trap (model),
3 fish cars (model).

Fishery apparatus—Continued.

Lines—One halibut trawl line, 1 George's cod hand line, 1 shore cod hand line, 1 pollock hand line, 1 shore cod and pollock hand line, 1 layout line, 1 sea trout line, 1 drumfish line, 1 whiting line, 1 reef line, 1 jack trolling line, 1 kingfish line, 1 grunt line, 1 rockfish line, 1 Italian fishery line, 1 line with jug floats, 1 Alaskan halibut line with hook and club.

Appliances for seizing: Two pairs oyster tongs, 1 pair oyster nippers, 1 oyster rake, 1 pair deep-water oyster tongs, 3 clam hoes, 1 hand clam hoe, 1 sponge hook, 4 codfish jigs, 1 dolphin drail, 12 bluefish and brass drails, 4 Eskimo codfish hooks, 4 British Columbia wooden fishhooks, 1 series of spring claw or trap hooks, 1 series of barbless hooks 2 shark hooks.

Accessories: One water glass used in sponge fishery.

Appliances for striking: One series of eel spears, 2 frostfish spears, 3 crab and flounder spears, 1 five-pronged grain, 1 conch harpoon, 1 turtle peg harpoon, 1 series of Indian fish spears, 1 series of swordfish dart heads, 2 porpoise harpoons, 2 porpoise lances.

Illustrations of fisheries: Four pictures illustrating the seal fishery, 1 picture of Aleuts killing walrus, 1 picture of salmon trap (interior Indians of Northwestern coast), 1 picture of Marsh's improved deep-water oyster tongs, 35' swinging screens containing views of the different fisheries, Commission of Fish and Fisheries stations, equipment of steamers *Albatross* and *Fish Hawk*, and plates from bulletins of the Commission.

The aquarium was a grotto-like, L-shaped structure, 120 feet long and 28 feet wide, containing 22 tanks, arranged on each side of the passageway, 12 feet wide, in equal numbers. Each tank was 7 feet long, 3 feet high, and 5 feet wide at the top, with a capacity of 550 gallons. The tanks next to the wall were arranged for the exhibition of the various fresh-water species, those on the opposite side the salt-water species, which included snappers, groupers, pompano, crevalle, mullet, and other bright-colored tropical fishes, besides crustaceans, shellfish, etc. The water for the fresh-water aquaria was obtained from a well 84 feet deep near the southeast corner of the building, which permitted of the exhibition of a number of specimens of rainbow and brook trout and of steel-head salmon throughout the Exposition. The water was cold and clear, of a uniform temperature of 59°. The water used in the salt-water tanks was brought from Morehead City, N. C., in tankcars



COMMISSION OF FISH AND FISHERIES—EXHIBITS AT EAST ENTRANCE TO AQUARIUM.

loaned the Commission by the Union Tank Line Company, of New York, and was stored in a large reservoir beneath the floor. From this reservoir it was forced by means of nickel pumps, driven by electricity, into a smaller tank 18 feet above the floor, from which it passed by means of gravity to the aquarium, thence returning to the reservoir.

The interior of the grotto was lighted through the aquarium tanks and a number of ventilators, placed in the crown of the grotto arch. It was finished in adamant and cement, partly as stucco work, partly plastered in imitation of roughly blasted rock tunnel. Where the two arms of the L met, a rotunda was formed, with a pool at the bottom of the rockwork, in imitation of the entrance to a water cave, which was illuminated by electric lights. Here and there in the grotto, masses of ferns and other evergreens were planted in the rockwork. Two arched portals, in imitation of cut stone, and of simple architectural design, formed the entrance to the grotto. The pool in the rotunda referred to was one of the most attractive features of the aquarium, being filled with bright-colored fishes and lighted with electric lights, submerged in water. It also contained a large sturgeon about 5 feet long, which was an endless source of amusement and interest to the visitors. The plans for the aquarium were prepared by Mr. G. A. Schneider, who was in charge of its construction and installation.

Collections of salt-water fishes were made at Morehead City, N. C., and at Pensacola, Fla., under the direction of Mr. L. G. Harron, the superintendent of the aquarium. The fresh-water fishes were furnished chiefly by the Commission stations at Wytheville, Va., and Quincy, Ill., and from the fish lakes in Washington; though collections were made from time to time in the immediate vicinity of Nashville for the procurement of fishes native to that section.

During the month of June the temperature in the salt-water aquarium became so high that it was necessary to reduce it in order to save the fishes. This was accomplished by passing it through 300 feet of iron pipe, arranged in the form of a coil, and packed in crushed ice and salt. By this means the

temperature of the water was kept down below the danger point. Later in the season the use of ice was discontinued, and the water was cooled by the use of water from the artesian well instead.

The following is a list of the fishes and other aquatic animals collected and exhibited during the Exposition:

MARINE SPECIMENS.

Num-ber.	Species.	Num-ber.	Species.
49	Red snappers.	35	Jack-fish.
8	Black snappers.	4	Squirrel-fish.
12	Jumping mullet.	10	Stingray.
25	Mullet.	17	Soap-fish.
93	Sheepshead.	11	Sacalay.
24	Conch.	2	Gaff topsail pompano.
22	Burr-fish.	13	Flounders.
6	Swell-fish.	95	Spots.
18	Sea-urchins.	30	Catfish.
11	Sea-robins.	3	White perch.
57	Sea bass.	2	Spotted trout.
1	Sea-horse.	2	King-fish.
37	Cow-fish.	5	Red drum.
50	Hog-fish.	4	Squeteague.
182	Pig-fish.	4	Trunk-fish.
7	Sailors choice.	5	Cavally.
197	Croakers.	1	Look down.
2	Red groupers.	300	Clams.
42	Black groupers.	81	Hermit-crabs.
47	Toad-fish.	1,400	Fiddler-crabs.
259	Pin-fish.	44	Blue crabs.
64	Spade-fish.	2	King-crabs.
17	Tile-fish.	31	Spider-crabs.
18	Pompano.	4	Horseshoe-crabs.
1	Bluefish.	25	Common crabs.

FRESH-WATER SPECIMENS.

50	Catfish.	300	Golden tench.
12	Carp.	90	Goldfish.
225	Green tench.	16	Golden ide.
1,000	Quinnat salmon (fry).	1	Red-horse.
25	Quinnat salmon.	20	Buffalo.
55	Steelhead trout.	2,000	Minnows.
1,000	Rainbow trout (fry).	9	Turtles.
218	Rainbow trout.	326	Black bass, L. M.
45	Brook trout.	11	Black bass, S. M.
78	Yellow perch.	20	Black bass, Fingerling.
34	White perch.	105	Warmouth bass.
3	Pike.	78	Crappie.
118	Suckers.	3	White bass.
3	Chubs.	3	Striped bass.
3	Gar-fish.	51	Yellow bass.
12	Eels.	227	Sun-fish.
3	Sturgeon.	258	Rock bass.
1	Dog-fish.		

During the absence of the representative from Nashville the exhibit of the Commission was under the direction of Mr. L. G.

Harron and Mr. W. P. Sauerhoff until September, when Mr. R. J. Conway was placed in charge until the close of the Exposition.

Acknowledgments.—The Commission is indebted to the Secretary of the Smithsonian Institution for the loan of material and cases forming parts of the exhibit. The following-named persons and corporations have also rendered valuable assistance:

The Union Tank Line Company, of New York, through the loan of tank cars for the transportation of salt water.

The Chesapeake and Ohio Railroad, the Louisville and Nashville Railroad, and the Nashville, Chattanooga and St. Louis Railroad companies, through the free transportation of tank cars containing salt water, and the transportation of the Commission of Fish and Fisheries cars and messengers engaged in the collection of fishes for the aquarium.

The Tennessee Centennial Exposition Company, through assistance rendered in the installation of the electrical appliances and the free use of power.

The Laidlaw-Dunn-Gordon Company, of Cincinnati, through the loan of an electric pump, used in the circulation of fresh water.

Mr. Robert T. Creighton, engineer in charge of the Exposition.

Mr. J. A. Pentacost, superintendent of electricity.

Mr. William Reyer, superintendent of the Nashville, Chattanooga and St. Louis Railway shops.

Mr. G. W. Hicht, for the free use of water from the Cockrill spring.

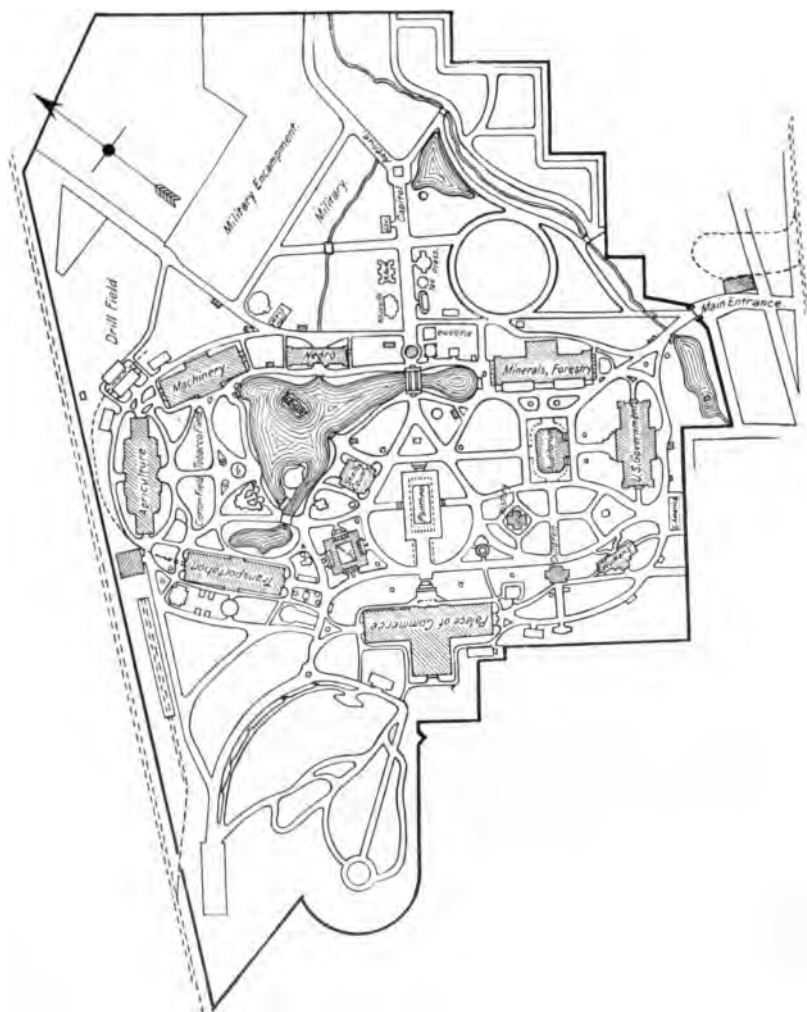
The total cost of the preparation, maintenance, and return of the exhibit of the Commission, including the aquarium, was \$16,309.77. The following statement shows the objects for which the money was expended:

Services	\$2, 131. 95
Special or contract services	2, 325. 75
Travel	1, 136. 89
Subsistence	2, 261. 10
Freight	366. 34
Cartage	54. 97
Expressage	270. 41

Exhibition cases, frames, aquarium, etc	\$3, 190. 25
Lumber and millwork	73. 29
Hardware, tools, etc	95. 90
Glass, paints, brushes, etc	691. 15
Supplies and preparators' material	1, 893. 82
Packing material	23. 71
Apparatus, specimens, etc	1, 131. 58
Decorations, partitions, etc	407. 30
Office expenses	255. 36
Total	16, 309. 77

W. DE C. RAVENEL,

Representative, Commission of Fish and Fisheries.



PLAN OF EXPOSITION GROUNDS.

APPENDICES.

APPENDIX A.

Statement of apportionment and transfers of funds among the several allotments of the appropriation, "Tennessee Centennial Exposition."

GENERAL FUND OF THE BOARD.

Allotments:

Original¹ \$10,000.00

Decorations,² from—

Department of State	\$52.83
War Department	102.07
Navy Department	87.88
Justice Department	49.47
Treasury Department	315.86
Post-Office Department	116.20
Interior Department	330.81
Department of Agriculture	328.21
Smithsonian Institution and National Museum	125.30
Commission of Fish and Fisheries	244.90
	1,753.53

Reapportionment,³ from—

Department of State	300.00
War Department	1,200.00
Navy Department	150.00
Justice Department	250.00
Interior Department	1,300.00
Department of Agriculture	2,000.00
	5,200.00

\$16,953.53

¹ The original allotment of the funds was made February 3, 1897.

² The cost of erecting partitions between the several Department spaces and of decorating the interior of the Government building was originally paid from the general fund of the board, and on July 10, 1897, that allotment was reimbursed by transfers of proportionate amounts of the total cost from the allotments of the respective Departments.

³ On August 5, 1897, the unexpended funds were reapportioned.

Transfers:

Reapportionment, to—

Treasury Department	\$1,000.00	
Smithsonian Institution and National Museum	1,000.00	
Commission of Fish and Fisheries	700.00	
	<u>2,700.00</u>	
Special to Navy Department ¹	150.00	
		<u>\$2,850.00</u>
Actual allotment		14,103.53

POST-OFFICE DEPARTMENT.

Allotment:

Original	\$4,000.00
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Transfer:

Decorations, to general fund	116.20
Actual allotment	<u>3,883.80</u>

DEPARTMENT OF STATE.

Allotment:

Original	\$3,000.00
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Transfers:

Decorations, to general fund	\$52.83	
Reapportionment, to general fund	300.00	
	<u>352.83</u>	
Actual allotment		2,647.17

COMMISSION OF FISH AND FISHERIES.

Allotments:

Original	\$15,500.00
Reapportionment, from general fund	1,000.00
	<u>\$16,500.00</u>

Transfer:

Decorations, to general fund	244.90
Actual allotment	<u>16,255.10</u>

DEPARTMENT OF JUSTICE.

Allotment:

Original	\$2,500.00
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Transfers:

Decorations, to general fund	\$49.47	
Reapportionment, to general fund	250.00	
	<u>299.47</u>	
Actual allotment		2,200.53

¹ Made December 1, 1897.



GENERAL VIEW OF GROUNDS, LOOKING NORTHEAST FROM TOP OF WOMAN'S BUILDING.

WAR DEPARTMENT.

Allotment:	
Original	\$6,500. 00
Transfers:	
Decorations, to general fund.....	\$102. 07
Reapportionment, to general fund	1, 200. 00
	<u>1, 302. 07</u>
Actual allotment.....	5, 197. 93

DEPARTMENT OF THE INTERIOR.

Allotments:	
Original	\$12, 000. 00
Special, from Department of Agriculture ¹	300. 00
	<u>\$12, 300. 00</u>
Transfers:	
Special, to Smithsonian Institution and Na-	
tional Museum ¹	1, 000. 00
Decorations, to general fund.....	330. 81
Reapportionment, to general fund	1, 300. 00
	<u>2, 630. 81</u>
Actual allotment.....	9, 669. 19

SMITHSONIAN INSTITUTION AND NATIONAL MUSEUM.

Allotments:	
Original	\$14, 500. 00
Special, from Interior Department ²	1, 000. 00
Reapportionment, from general fund.....	700. 00
	<u>\$16, 200. 00</u>
Transfer:	
Decorations, to general fund.....	125. 30
Actual allotment.....	<u>16, 074. 70</u>

TREASURY DEPARTMENT.

Allotments:	
Original	\$10, 000. 00
Reapportionment, from general fund.....	1, 000. 00
	<u>\$11, 000. 00</u>
Transfer:	
Decorations, to general fund.....	315. 86
Actual allotment.....	<u>10, 684. 14</u>

¹ March 13, 1897.

² July 10, 1897.

NAVY DEPARTMENT.

Allotments:

Original	\$8,000. 00	
Special, from general fund ¹	150. 00	
Special, from Department of Agriculture ²	60. 00	
		\$8, 210. 00

Transfers:

Decorations, to general fund.....	87. 88	
Reapportionment, to general fund	150. 00	
		237. 88

Actual allotment 7, 972. 12

DEPARTMENT OF AGRICULTURE.

Allotment:

Original	\$14,000. 00
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Transfers:

Special, to Interior Department ³	\$300. 00	
Decorations, to general fund.....	328. 21	
Reapportionment, to general fund	2,000. 00	
Special, to Navy Department ⁴	60. 00	
		2, 688. 21

Actual allotment 11, 311. 79

AGGREGATION.

Actual allotments:

General fund of the board.....	\$14, 103. 53
Post-Office Department	3, 883. 80
Department of State	2, 647. 17
Commission of Fish and Fisheries	16, 255. 10
Department of Justice	2, 200. 53
War Department	5, 197. 93
Department of the Interior.....	9, 669. 19
Smithsonian Institution and National Museum	16, 074. 70
Treasury Department	10, 684. 14
Navy Department	7, 972. 12
Department of Agriculture	11, 311. 79

Total appropriation for exhibits 100,000. 00

¹ March 13, 1897.

² July 10, 1897.

³ On August 5, 1897, the unexpended funds were reapportioned.

⁴ Made December 1, 1897.



GENERAL VIEW OF GROUNDS, LOOKING NORTH.

APPENDIX B.

History of bills and resolutions introduced in the United States Congress relating to the Tennessee Centennial Exposition, Nashville, 1897.

Doc. No.	Con- gress.	Ses- sion.	Dates of action.	Titles and action.
H. R. 8109...	53d	3d	Dec. 7, 1894	To aid and encourage the holding of the Tennessee Centennial Exposition, at Nashville, Tenn., in the year 1896, and making an appropriation therefor. Introduced in House of Representatives by Mr. Washington and referred to Committee on Appropriations.
H. R. 3916 ¹ ...	53d	3d	Feb. 19, 1895	Introduced in House of Representatives by Committee on Appropriations (H. R. Report 1858) as substitute for H. R. 8109.
S. 2716	53d	3d	Feb. 5, 1895	To aid and encourage the holding of the Tennessee Centennial Exposition, at Nashville, Tenn., in the year 1896, and making an appropriation therefor. Introduced in Senate by Mr. Bate and referred to Committee on Appropriations.
S. 2778	53d	3d	Feb. 19, 1895	To aid and encourage the holding of the Tennessee Centennial Exposition, at Nashville, Tenn., in the year 1896, and making an appropriation therefor. Introduced in Senate by Mr. Bate and referred to Committee on Education and Labor.
H. R. 161	54th	1st	Feb. 24, 1895	Reported back.
			Dec. 6, 1895	To aid and encourage the holding of the Tennessee Centennial Exposition at Nashville, Tenn., in the year 1896, and making an appropriation therefor. Introduced in House of Representatives by Mr. Washington and referred to Committee on Appropriations.
H. R. 8193...	54th	1st	Apr. 14, 1896	To aid and encourage the holding of the Tennessee Centennial Exposition at Nashville, Tenn., in the year 1897, and making an appropriation therefor. Introduced in House of Representatives by Mr. Brown and referred to Committee on Appropriations.
H. Res. 167...	54th	1st	Apr. 30, 1896	Reported back. (H. R. Report 1544.) Authorizing foreign exhibitors at the Nashville Centennial Exposition, to be held in Nashville, Tenn., in 1897, to bring to this country foreign laborers from their respective countries for the purpose of preparing for and making their exhibits, and allowing articles imported from foreign countries for the sole purpose of exhibition at said exposition to be imported free of duty, under regulations prescribed by the Secretary of the Treasury.
H. Res. 167...	54th	1st	Apr. 10, 1896	Introduced in House of Representatives by Mr. Washington and referred to Committee on Ways and Means.
			May 1, 1896	Reported back and passed House.
			May 6, 1896	Referred to Senate Committee on International Expositions.
			May 11, 1896	Reported back and passed Senate.
			May 18, 1896	Approved by President.

¹ Substitute for H. R. 8109.

History of bills and resolutions introduced in the United States Congress relating to the Tennessee Centennial Exposition—Continued.

Doc. No.	Congress.	Session	Date of action.	Titles and action.
S. Res. 134 ...	54th ..	1st ..	.....	Authorizing foreign exhibitors at the Tennessee Centennial Exposition, to be held in Nashville, Tenn., in 1897, to bring to this country foreign laborers from their respective countries for the purpose of preparing for and making their exhibits, and allowing articles imported from foreign countries for the sole purpose of exhibition at said exposition to be imported free of duty, under regulations prescribed by the Secretary of the Treasury.
			Apr. 15, 1896	Introduced in Senate by Mr. Bate and referred to Committee on Finance.
			Apr. 17, 1896	Reference changed to Committee on International Expositions.
S. 2889	54th ..	1st ..	.....	To aid and encourage the holding of the Tennessee Centennial Exposition at Nashville, Tenn., in the year 1897, and making an appropriation therefor.
			Apr. 17, 1896	Introduced in Senate by Mr. Bate and referred to the Committee on International Expositions.
			May 6, 1896	Reported back.
			May 9, 1896	Passed Senate.
			May 12, 1896	Referred to House of Representatives, Committee on Ways and Means.
		2d ..	Dec. 21, 1896	Committee discharged and bill debated and passed House.
			Dec. 22, 1896	Approved by President.
	54th ..	1st ..	May 12, 1896	Resolution in Senate to accept invitation and appoint committee to attend Exposition; passed.
			May 28, 1896	Committee appointed in Senate to attend.
			May 29, 1896	Resolution in Senate to pay expenses of committee appointed to attend Exposition; passed.
S. Res. 189...	54th ..	2d ..	.....	Providing for the erection of a Government building at the Tennessee Centennial Exposition.
			Jan. 11, 1897	Introduced in Senate by Mr. Bate and passed.
			Jan. 13, 1897	Passed House of Representatives.
			Jan. 21, 1897	Approved by President.
H. Res. 235...	54th ..	2d ..	.....	To provide for the expenses of the Tennessee Centennial commissioners from the District of Columbia.
			Jan. 18, 1897	Introduced in House of Representatives by Mr. Washington and referred to Committee on Appropriations.
H. R. 8878....	55th ..	2d ..	.....	For the relief of the Tennessee Centennial Company.
			Mar. 7, 1898	Introduced in House of Representatives by Mr. Gaines and referred to Committee on Claims.
H. J. Res. 249	56th ..	1st ..	.....	Providing for the publication of the report of the board of management of the United States Government exhibit at the Tennessee Centennial Exposition.
			May 7, 1900	Introduced in House of Representatives by Mr. Brownlow and referred to Committee on Printing.
		2d ..	Feb. 25, 1901	Reported back with amendments, and passed by House of Representatives.
			Feb. 26, 1901	Referred to Senate Committee on Printing.
			Feb. 28, 1901	Reported back and passed Senate.
			Mar. 4, 1901	Approved by the President.



GENERAL VIEW OF GROUNDS.

APPENDIX C.

TENNESSEE CENTENNIAL EXPOSITION, 1897.

OFFICERS.

JOHN W. THOMAS, President.
V. L. KIRKMAN, Nashville, First Vice-President.
W. A. HENDERSON, Knoxville, Second Vice-President.
JOHN OVERTON, Jr., Memphis, Third Vice-President.
CHARLES E. CURREY, Secretary.
W. P. TANNER, Treasurer.
E. C. LEWIS, Director-General.
A. W. WILLS, Commissioner-General.
FRANK GOODMAN, Auditor.
S. A. CHAMPION, General Counsel.

OFFICE OF THE DIRECTOR-GENERAL.

E. C. LEWIS, Director-General.
W. H. BRUCE, Chief Clerk.

DIRECTOR OF AFFAIRS.

WILLIAM L. DUDLEY.

GROUND AND BUILDINGS.

ROBERT T. CREIGHTON, Engineer in Charge.
W. B. FELTS, Bookkeeper.
EASTMAN G. CURREY, Commandant of the Guard.

BUREAU OF PROMOTION AND PUBLICITY.

HERMAN JUSTI, Chief.

APPENDIX D.

CHARTER OF INCORPORATION OF THE CENTENNIAL EXPOSITION COMPANY OF TENNESSEE.

Be it known, that Nat. Baxter, jr., W. H. Jackson, A. W. Wills, J. P. Drake, H. W. Buttorff, J. B. Killebrew, J. L. Weakley, J. D. Plunket, Herman Justi, W. C. Smith, John J. McCann, J. W. Thomas, sr., F. T. Cummins, William L. Dudley, and Thos. J. Tyne are hereby constituted a body politic and corporate, by the name and style of the Centennial Exposition Company, for the encouragement and support of art, agriculture, horticulture, and mechanic arts, such as fairs, expositions, art exhibits, and associations

of like nature, including associations for the improvement of blooded stock, and objects of like character.

The general powers of said corporation are: To sue and be sued by the corporate name; to have and use a common seal, which it may alter at pleasure; if no common seal, then the signature of the name of the corporation by any duly authorized officer shall be legal and binding; to purchase and hold, or receive by gift, in addition to the personal property owned by said corporation, any real estate necessary for the transaction of the corporate business, and also to purchase or accept any real estate in payment or part payment of any debt due to the corporation, and sell realty for corporation purposes; to establish by-laws and make all rules and regulations, not inconsistent with the law and Constitution, deemed expedient for the management of corporate affairs, and to appoint such subordinate officers and agents, in addition to a president and secretary or treasurer, as the business of the corporation may require, designate the name of the office and fix the compensation of the officer.

The following provisions and restrictions are coupled with said grant of powers: A failure to elect officers at the proper time does not dissolve the corporation, but those in office hold until the election or appointment and qualification of their successors. The terms of all officers may be fixed by by-laws of the corporation, the same not, however, to exceed two years. The corporation may, by by-laws, make regulations concerning the subscription for or transfer of stock; fix upon the amount of capital to be invested in the enterprise; the division of the same into shares; the time required for payment thereof by the subscribers for stock; the amount to be called for at one time, and in case of failure of any stockholder to pay the amount thus subscribed by him at the time and in the amounts thus called, a right of action shall exist in the corporation to sue said defaulting stockholder for the same. The board of directors, which may consist of five or more members, at the option of the corporation, to be elected either in person or by proxy, by a majority of the votes cast, each share representing one vote; shall keep a full and true record of all proceedings, and an annual statement of receipts and disbursements shall be copied on the minutes, subject at all times to the inspection of any stockholder. The books of the corporation shall show the original or subsequent stockholders, their respective interests, the amount which has been paid on the shares subscribed, the transfer of stock, by and to whom made, also other transactions in which it is presumed a stockholder or creditor may have an interest.

The amount of unpaid stock due from a subscriber to the corporation shall be a fund for the payment of any debts due from the corporation, nor shall the transfer of stock by any subscriber relieve him from payment, unless his transferee has paid up all or any of the balance due on said original subscription.

By no implication or construction shall the corporation be deemed to



LAYING CORNER STONE OF THE PARTHENON.

possess any powers except those hereby expressly given or necessarily implied from the nature of the business for which the charter is granted, and by no inference whatever shall said corporation possess the power to discount notes or bills, deal in gold or silver coin, issue any evidences of debt as currency, buy and sell any agricultural products, deal in merchandise, or engage in any business outside the purpose of the charter.

The right is reserved to repeal, annul, or modify this charter. If it is repealed, or if the amendments proposed, being not merely auxiliary but fundamental, are rejected by a vote representing more than one-half of the stock, the corporation shall continue to exist for the purpose of winding up its affairs, but not to enter upon any new business. If the amendments or modifications, being fundamental, are accepted by the corporation as aforesaid, in a general meeting called for that purpose, any minor, married woman, or other person under disability, or any stockholder not agreeing to accept of the modification, shall cease to be a stockholder, and the corporation shall be liable to pay said withdrawing stockholders the par value of their stock, if it is worth so much; if not, then so much as may be its real value in the market on the day of the withdrawal of said stockholders as aforesaid: *Provided*, That the claims of all creditors are to be paid in preference to said withdrawing stockholders.

The majority of the board of directors shall constitute a quorum, and shall fill all vacancies until the next election. The first board of directors shall consist of the five or more corporators who shall apply for and obtain the charter. The said corporation may have the right to borrow money and issue notes or bonds upon the faith of the corporate property, and also to execute a mortgage or mortgages as further security for repayment of money thus borrowed.

APPENDIX E.

PRESIDENT'S REPORT, TOGETHER WITH SOME DATA SUPPLIED BY THE DIRECTOR-GENERAL AND THE AUDITOR.

At a meeting of the stockholders of the exposition company held at Watkins Hall, Monday evening, June 13, 1898, President John W. Thomas submitted the following report, together with sundry data prepared by Mr. Frank Goodman, the company's efficient auditor:

To the stockholders of the Centennial Exposition Company of Tennessee:

The one hundredth anniversary of the admission of Tennessee into the Federal Union was, through your liberality and patriotism, appropriately celebrated by holding at Nashville, from May 1 to October 31, 1897, an exposition of the products and resources of Tennessee. We were also favored with magnificent exhibits from other States and countries, and complimented with a grand display by the United States Government. The

total amount subscribed to this patriotic enterprise by 8,300 parties, including \$8,510 for souvenir certificates, was \$205,653.03, of which \$39,252.59, due from 1,890 subscribers, remains unpaid, leaving amount paid \$166,400.44. In addition to this, there was appropriated by the State of Tennessee \$50,000, subscribed by the county of Davidson \$50,000, by the city of Nashville \$100,000, subscribed and donated by railroads \$106,695, making the total amount paid \$473,095.44. The receipts from admissions, \$435,399.95; concessions, \$124,735.60; departments, \$27,783.72, and salvage, \$32,175.05, making a total of \$620,094.32, added to the \$473,095.44 paid subscriptions, make a grand total of \$1,093,189.76, which was disbursed as follows:

Administration department.....	\$63, 964. 82
Admission department	25, 134. 18
Agricultural department	14, 448. 51
Art department.....	25, 639. 29
Children's department	2, 452. 78
Kindergarten department	628. 35
Commissioner-general	15, 630. 50
Promotion and publicity	63, 745. 65
Concessions department.....	18, 923. 67
Electrical department.....	67, 991. 17
Emergency hospital	3, 239. 84
Educational department.....	408. 80
Forestry department	759. 20
Foreign department.....	3, 358. 98
Geology, minerals, and mines	2, 525. 58
Grounds and buildings.....	524, 460. 51
Guard department	38, 329. 38
History department.....	766. 53
Hygiene and medicine department.....	789. 63
Installation department	3, 728. 60
Inaugural ceremonies	7, 212. 00
Live-stock department	551. 77
Machinery department.....	80, 527. 72
Military department.....	9, 085. 08
Music and entertainments.....	99, 864. 99
Negro department.....	2, 009. 68
Preliminary organization	19, 263. 07
Women's department.....	749. 48
Total	1, 093, 189. 76

Vouchers for all disbursements have been properly recorded and systematically filed in the auditor's office, and a tabulated statement of all receipts and disbursements from July 4, 1894, to April 1, 1898, is herewith submitted. The attendance was as follows: May, 205,351; June, 302,442;



GROUNDS AND BUILDINGS—VIEW LOOKING SOUTH.

July, 205,918; August, 199,213; September, 273,824; October, 492,831; total, 1,679,579, of which 512,887 (mostly exhibitors, concessionaries, and employees) were admitted free, leaving 1,166,629 paid admissions, from which was received \$435,399.95, an average of 37½ cents each. The \$220,000 of bonds authorized on February 4, 1897, were not sold, but used as collateral for loans aggregating \$130,000, all of which have been paid, the bonds returned and canceled. We are indebted to the First National, Fourth National, American National, and Union Bank and Trust Company, of Nashville, to the Louisville and Nashville and Nashville and Chattanooga and St. Louis railroads, and to the Continental National Bank and Mechanics' National Bank, of New York, for favoring us with those loans, and especially to the American National Bank, of Nashville, for repeated accommodations. The financial obligations of the company on this date, June 13, 1898, are as follows: The Battle Abbey fund, \$6,026.96; History of the Exposition, \$2,400; auditor's expenses, \$244.25; guarantee of art committee, \$500; court costs, \$152.39; total, \$9,323.60. To meet which we have the following assets: Cash on hand, \$39.44; cash in court on commerce building, \$1,500; uncollected accounts considered good, \$1,038.40; Louisville and Nashville, overcharge on pictures, \$64.79; 600 subscribers to Official History, \$3,000; estimated value of salvage on hand, \$5,000; total, \$10,642.63.

“NASHVILLE, TENN., *June 13, 1898.*

“DEAR SIR: I had the honor to submit to you on November 9, 1897, the date of the last meeting of the board of directors, a report of the organization, building, operation, and successful closing on October 30, of that year, of the Centennial Exposition Company of Tennessee. This report covered in a general way all the history of your company, and also contained an estimate of the receipts likely to accrue from salvage. As a number of people were at that time bidding upon this salvage, it was not deemed best to put a low estimate upon the same. Reports of the chiefs of all the different departments, with full record of exhibits, installation, and presentation, have gone into the hands of the historian, and will appear in full in the official history now being published. The cashier will furnish you with a statement of the company's present financial condition, and the auditor has already furnished you with a detailed statement of the receipts and disbursements to date. In addition to the assets furnished, we have the following structures still standing upon the grounds, which, held intact, would be of great value, but are worth as salvage only about \$10,000: Parthenon, history building, auditorium, flag-staff, two band stands, Rialto and two small bridges, one pagoda, emergency hospital, children's nursery, and several other minor structures. The grounds are leased, and payment arranged for until September 16, 1898, and you therefore have till that time without further arrangement, to remove these structures in order to have them bring any value to you. The Tennessee Centennial has served its purpose, and the administration

ended. Conscious that you have now little left in which I can further aid you, after three years of constant service, sometimes severe, but always with a pleasant side, I return you the trust confided to me. I am under obligations to you, sir, the executive committee, and the directory for the oft-repeated assurances of confidence and approval.

" Respectfully,

" E. C. LEWIS, *Director-General.*

" Maj. J. W. THOMAS,

" *President Tennessee Centennial Exposition Company, City.*"

In concluding my report, the president desires to express his thanks to the executive committee, the director-general, and other officials for their intelligent and hearty cooperation in conducting this Exposition to a successful termination.

Respectfully submitted.

J. W. THOMAS, *President.*

APPENDIX F.

AUDITOR'S REPORT.

The following report includes receipts and disbursements from July 4, 1894, to June 13, 1898:

NASHVILLE, TENN., *June 13, 1898.*

MY DEAR SIR: I inclose financial statement embracing the result of all financial transactions from the date the company was organized, in 1894, to and including the transactions of to-day, even those passed upon by your executive committee at its session at 3 p. m. to-day. At times there were nearly 7,000 open accounts upon our books, and through which \$1,101,285.84 were received and \$1,101,246.40 disbursed, leaving a balance on hand at the close of business this evening of \$39.44, which has been verified by bank account.

Respectfully submitted.

FRANK GOODMAN, *Auditor.*

Maj. JOHN W. THOMAS,

President of the Tennessee Centennial Exposition Company.

Accounts showing source of receipts and disbursements, July 4, 1894, to June 13, 1898.

RECEIPTS.

Subscriptions:

Individuals, firms, and corporations, \$265,438.02; city of Nashville, \$100,000; county of Davidson, \$50,000; State of Tennessee, \$50,000; souvenir certificates—individuals, \$8,460; States, \$50 \$473, 948. 02



GROUNDS AND BUILDINGS—VIEW LOOKING NORTH.

Concessions:

Cash awards, \$27,622.45; floor space, \$13,243.10; percentages, amusements, \$77,908.47; total earnings, \$118,774.02; cashiers' salaries, \$3,953.70; cash registers, \$1,279.48; tickets, \$732.30 \$124,757.50

Admissions:

Children's auxiliaries, \$204.26; gate receipts, general, \$268,058.25; terminal station, \$126,775.45; season tickets, \$29,036; photo passes, \$12,008.50 436,082.46

Receipts in connection with departments:

Electrical, \$16,785.37; grounds and buildings, \$1,299.65; guards' uniforms, \$2,236; music and amusements, \$1,734.79; machinery, \$401.25; water, \$991.11; souvenir coins, \$1,413.23; power, \$18.65; Centennial City (fines), \$1,079.30; publicity and promotion, \$398.50; nursery, Judge Ferriss, \$51.98; negro, \$53.62; miscellaneous, \$599.60; box storage, \$414.12; interest on bonds (city), \$1,112.65; salvage, \$37,908.04 66,497.86

Total receipts, excluding loans, renewals, and similar items 1,101,285.84

DISBURSEMENTS.

Departments:

Administration	\$65,252.55
Publicity and promotion—regular accounts, \$64,220.95; commissioner-general, \$15,- 630.50	79,851.45
Grounds and buildings	528,254.42
Art department	26,148.58
Agricultural	14,448.51
Machinery	80,533.04
Electrical	67,991.17
Geology, minerals, and mines	2,525.58
Forestry	759.20
Hygiene, medical and surgical appliances ..	789.63
Live stock and poultry	551.77
Military	10,812.17
Educational	408.80
Children's	3,081.13
Negro	2,009.68
Woman's	749.48
Music and amusements	100,122.99
Admissions	25,134.18
Concessions	18,923.67

Guard	\$38, 329. 38
Installation	3, 728. 60
Hospital	3, 239. 84
History	766. 53
Foreign	3, 358. 98
Inaugural ceremonies	7, 212. 00
Preliminary organization	16, 263. 07

Total disbursements, excluding loans, payment of renewals, etc	\$1, 101, 246. 40
Balance, cash on hand and in bank, close of business June 13, 1898	39. 44

Total 1, 101, 285. 84

The net value of the company's assets amounted to about \$10,000, which is in excess of all liabilities, inclusive of about \$6,000 of the Battle Abbey fund.

GROUNDS AND BUILDINGS.

The exact cost of the various buildings proper is shown by the books of the auditor to be as follows, the architects' fees and the cost of grading in all cases being included:

Agriculture	\$24, 562. 55
Children's	5, 302. 30
History	7, 183. 13
Hygiene and education	12, 364. 22
Minerals and forestry	21, 570. 30
Transportation	16, 729. 74
Administration	1, 650. 00
Emergency hospital	2, 000. 00
Band stand	1, 287. 00
Entrances	2, 150. 00
Military buildings	1, 250. 00
Press building	1, 850. 00
Rialto	3, 800. 00
Auditorium	21, 444. 20
Commerce	45, 238. 27
Machinery	24, 392. 51
Negro	12, 759. 77
Parthenon	34, 611. 75
Woman's	14, 955. 45
Custom-house	800. 00
Bath houses	1, 000. 00
Boiler house	3, 083. 18



MAIN ENTRANCE TO GROUNDS.

Flagstaff	\$2,500.00
Nursery	800.00
Power house	2,122.30
Mexican building	1,090.00
Ornamentation of grounds and buildings:	
Statue of Pallas Athena	1,594.20
Sundry ornaments and decorations	6,934.89
Fountains	2,941.50
Seals, waterfowl, and fish	478.85
Floral department	13,097.79
Sanitary department	25,028.98
Public-comfort department	4,950.20
Water	17,304.15
Real estate purchased	630.00
Sundry expenses:	
Freight	43,179.58
Materials	14,832.70
Tools, implements, etc	1,934.87
Fire protection	1,779.16
Fire insurance	4,449.74
Furniture and fixtures	100.40
Stationery, office supplies	273.94
Wages and salaries	78,726.05
Rents	17,033.75
Taxes	818.29
Advertising	480.82
Traveling expenses	346.45
Damage to property	240.00
Incidental expenses	192.44
Total expenses of grounds and buildings	520,390.51

APPENDIX G.

REPORT OF DEPARTMENT OF CONCESSIONS.

Total number of concessions operated	212
Gross receipts to concessionaires	\$620,223.65
Revenue, debits	123,265.84
Advancement, debits	8,078.30
Total debits	131,344.14

Cash credits on revenue	\$116,867. 32
Cash credit on advancements	6,342. 53
Credits by vouchers for erroneous charges and rebates	3,831. 57
Total credit, all sources	127,041. 42
Total debits	131,344. 14
Total credits	127,041. 42
Balance uncollected	4,302. 72
In hands of attorneys, considered good	\$1,263. 20
In hands of attorneys, considered doubtful	429. 40
Worthless	2,610. 12
	4,302. 72

DISTRIBUTION OF NET REVENUE.

Total charges, all sources	\$131,344. 14
Less charge for deposits, refunded	\$381. 30
Rebate vouchers and erroneous charges	3,831. 57
	4,212. 87
	127,131. 27
Received from amusements	\$57,518. 34
Received from restaurants, lunches, and beer	28,210. 20
Received from cigars and tobacco	2,952. 98
Received from souvenirs and novelties	3,141. 13
Received from soft drinks	5,065. 90
Received from peanuts, popcorn, fruit, and candy ..	5,155. 36
Received from merchandise	24,317. 26
Received from slot machines	770. 10
	127,131. 27

CHARGES BY MONTHS.

Total to May 1	\$33,829. 00
Total for May	11,228. 22
Total for June	25,382. 23
Total for July	13,084. 22
Total for August	10,897. 51
Total for September	13,841. 73
Total for October	22,097. 43
Total to December 31	602. 50
Total refunded	381. 30
Total	131,344. 14



AGRICULTURE BUILDING.

Tennessee Centennial Exposition.

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Statement of cost of operating and net profit of department of concessions.

Total charges to concessionaires	\$131, 344. 14	
Cost of cash registers	\$2, 080. 65	
Return from cash registers	2, 099. 48	
	<u>18. 83</u>	
		\$131, 362. 97
Less advancement account, cashiers, registers, and tickets	8, 078. 30	
Less rebates and erroneous charges	<u>3, 465. 81</u>	
		11, 544. 11
Net revenues derived		119, 818. 86
Salaries of clerks, pre-Exposition	\$525. 00	
Salaries of chief of department and assistants	3, 309. 48	
Salaries of gatemen, relief force	<u>251. 35</u>	
		\$6, 085. 83
Salaries of gondola gatemen	468. 00	
Salaries of gondoliers	1, 978. 60	
Cost of gondolas, freight, and repairs ..	<u>1, 561. 00</u>	
		4, 007. 60
Stationery and office supplies		<u>400. 00</u>
Cost of 3,500,000 tickets for conces- sions	\$1, 135. 18	
Less amount charged concessionaires ..	<u>942. 45</u>	
		192. 73
Total cost of operating		10, 686. 16
Net profit		109, 132. 70

APPENDIX H.

Statistics of department of admissions, by months.

MAY.

Day.	Occasion.	Total daily attend- ance.	Total daily paid attend- ance.	Total daily cash receipts.
1	Opening day	20, 317	8, 289	\$3, 304. 75
3	Essenic' Knights	4, 740	1, 768	706. 00
4	.....	5, 330	1, 804	683. 25
5	Mexico and children's day	5, 958	3, 024	1, 088. 00
6	.....	4, 703	1, 979	756. 50
7	Art	6, 566	3, 214	738. 25
8	Public school art day	14, 602	9, 748	2, 211. 60
10	Mothers' day	4, 327	1, 171	496. 25
11	Suffrage day	4, 151	1, 182	504. 75
12	Tammany day	8, 161	3, 926	1, 532. 75

*Tennessee Centennial Exposition.**Statistics of department of admissions, by months—Continued.*

MAY—Continued.

Day.	Occasion.	Total daily attendance.	Total daily paid attendance.	Total daily cash receipts.
13	Tennessee College day	6,394	2,596	\$954.50
14	Knights of Pythias	5,264	1,794	698.00
15	Opening of Government building	13,243	8,000	2,818.00
17	Woman's Musical Congress	6,130	2,358	921.50
18	Tennessee bankers' day	5,958	2,313	881.50
19	Wilmington, N. C., and Red Cross day	8,115	4,192	1,484.75
20	Belmont School	6,762	3,001	1,205.50
21	King's Daughters	5,782	3,276	1,133.55
22	Kentucky and Queen Victoria day	13,415	9,362	2,825.55
24	State Federation Woman's Clubs	7,728	4,191	1,480.15
25	Greek letter fraternities	6,505	3,238	1,139.05
26	Art day	9,172	5,812	1,925.75
27	Railway conductors	7,370	3,656	2,358.55
28	Wisconsin day	6,721	3,534	1,306.95
29	Bank clerks' day	11,400	7,800	2,358.55
31	Bank clerks' day	6,531	3,288	1,180.45
	Total	205,351	104,525	35,721.60

JUNE.

1	Tennessee day	12,595	9,081	\$2,875.35
2	Grand Army of the Republic	7,331	4,047	1,471.85
3	Travelers' Protective Association	6,746	3,509	1,274.35
4	Children's day	7,394	4,289	1,521.25
5	Gallatin and Sumner counties	19,171	14,840	3,822.85
6	Master Plumbers of Tennessee	6,590	3,363	1,119.55
7	Winter Wheat Millers; Knights and Ladies of	7,260	4,782	1,459.95
9	Dixie	9,546	6,131	2,041.15
10	Alabama Press Association	8,086	4,207	1,552.55
11	McKinley and Ohio day	25,212	20,792	7,346.25
12	McKinley and Cincinnati day	15,169	10,348	3,932.65
14	Lebanon and Wilson County day	7,791	4,398	1,416.55
15	Kappa Alpha Fraternity; Giles County schools	6,948	3,321	1,191.45
16	Knoxville day	9,824	6,278	2,136.75
17	.....	7,983	4,292	1,570.80
18	.....	7,007	3,682	1,284.75
19	.....	10,432	6,729	2,016.90
21	English jubilee	10,010	6,528	2,447.50
22	United Confederate Veterans	19,134	15,421	6,067.25
23	.....do.....	28,312	24,407	10,055.95
24	.....do.....	26,599	22,657	8,887.95
25	Florida day; Peabody normal teachers' day	10,126	7,059	2,920.95
26	Georgia day; Franklin and Williamson County day	11,567	7,797	2,535.10
28	Bowling Green and Franklin, Ky., day	6,514	3,286	1,202.05
29	Columbia and Maury County day	6,936	3,788	1,310.85
30	Phi Gamma Delta Fraternity	8,124	4,927	1,630.45
	Total	302,442	209,929	75,093.00

JULY.

1	Phi Gamma Delta Fraternity	5,854	2,772	\$1,007.40
2	.....do.....	5,377	2,490	873.10
3	Sigma Alpha Epsilon Fraternity	21,805	18,243	3,955.10
5do.....	5,769	2,813	1,039.30



AUDITORIUM.

Tennessee Centennial Exposition.

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Statistics of department of admissions, by months—Continued.

JULY—Continued.

Day.	Occasion.	Total daily attendance.	Total daily paid attendance.	Total daily cash receipts.
6		4,628	1,931	\$775.80
7		7,209	4,176	1,443.25
8		4,820	3,370	907.45
9	Dixie	4,881	2,054	709.85
10	Normals, Alabama (negro)	9,749	5,582	1,954.30
12		5,535	2,586	884.30
13		5,430	2,582	896.50
14		6,993	4,148	1,429.80
15	South Pittsburg	5,085	2,422	927.90
16	Cotton Seed Crushers' Convention	5,394	2,500	877.05
17		7,796	4,714	1,501.20
19		4,967	2,318	848.95
20	Baptist day	7,868	5,068	1,991.95
21	State teachers' Tennessee druggists	7,485	4,648	1,652.85
22	Virginia Press Association	6,380	3,846	1,346.20
23	Cowboys' League	5,389	2,719	985.65
24	do	8,071	5,522	1,780.55
26		4,439	1,793	654.30
27		5,449	2,728	965.05
28	Tennessee Bar Association	9,636	6,419	1,954.25
29	Tennessee Bar Association; Negro Working	11,441	8,036	2,552.45
30	People's day			
31	Tennessee Bar Association	10,182	6,732	2,146.35
		18,186	14,287	4,512.55
	Total	205,918	126,405	40,563.00

AUGUST.

2		5,058	2,292	\$705.65
3	Stenographers' Centennial Association	3,375	6,050	1,096.50
4	Stenographers' day	2,618	5,117	997.70
5	do	4,237	7,060	1,415.25
6	do	2,615	5,014	929.35
7	Monteagle day	3,910	7,485	1,377.85
9	County court day	2,625	5,687	906.15
10	New Orleans and Louisiana day	4,388	7,247	1,408.55
11		3,186	5,933	1,148.70
12	Louisville Red Men's day	7,145	10,257	2,604.25
13		2,764	5,469	1,047.70
14		14,411	17,827	5,652.15
16		2,357	5,127	852.00
17	Webb's School	5,004	7,900	1,732.40
18	Lumber Manufacturers, Hoo-Hoos, and State Board of Health		6,021	
19		4,917	7,690	1,762.35
20	Louisville and Nashville Railroad employees	3,263	5,906	1,226.95
21		6,334	9,340	2,109.25
23		2,546	5,231	947.50
24	United Presbyterians	6,490	9,467	2,106.65
25	Centennial negro employees	13,183	16,099	3,623.05
26	Woodmen's day	6,312	9,707	2,198.25
27		4,184	7,028	1,355.40
28	Sigma Chi Fraternity	5,657	8,755	1,859.65
30	General insurance agents	2,443	8,147	983.55
31		5,132		1,701.00
	Total	124,721	199,213	43,034.75

Statistics of department of admissions, by months—Continued.

SEPTEMBER.

Day.	Occasion.	Total daily attendance.	Total daily paid attendance.	Total daily cash receipts.
1	National Race Council	7,586	4,752	\$1,579.00
2	do	8,242	5,418	1,935.30
3	Carroll County day	8,289	5,347	1,832.40
4	Brandon's School	9,679	6,481	2,146.75
6	Labor Day	7,549	4,652	1,578.25
7	United States Veterinary Medical Association— Iowa	9,595	6,918	2,279.50
8	do	6,715	3,988	1,443.35
9	American fruit growers	8,597	5,784	2,043.95
10	Vegetable growers	7,839	4,833	1,939.20
11	Nashville day	41,558	38,963	14,004.30
13	do	5,618	2,651	958.95
14	Shelby County and Memphis day	10,510	7,380	2,722.55
15	Norfolk day, old-time telegraphers	7,345	4,456	1,752.45
16	Old-time telegraphers	7,525	4,658	1,771.90
17	Old-time telegraphers and physicians and sur- geons	5,666	2,979	1,084.65
18	Arkansas day, children's carnival	16,708	13,016	3,893.45
20	Young Men's Institute	6,063	3,163	1,259.55
21	Irish-American day, Mexican veterans	16,257	12,811	5,045.50
22	A. O. U. W., American Forestry, and Chatta- nooga day	19,349	16,293	5,033.40
23	Massachusetts day	7,745	4,778	1,826.65
24	National Spiritualists Association	5,761	3,043	1,141.10
25	do	9,030	5,816	1,852.05
27	Journymen plumbers	5,907	2,874	1,007.65
28	J. O. U. A. M.	9,799	6,795	2,251.40
29	do	6,952	3,667	1,416.70
30	Kate Kirkman day	17,740	14,226	5,323.45
	Total	273,824	195,743	69,123.40

OCTOBER.

1	Crockett Clan	5,917	2,687	\$945.75
2	do	9,177	5,530	1,736.25
4	do	5,269	2,325	708.25
5	Rhode Island day, Evansville day	10,117	6,900	2,777.70
6	German-American day, Michigan day	13,618	9,844	3,726.70
7	King's Mountain, New Jersey, Montgomery County day	13,753	10,132	4,086.20
8	Nebraska day	35,062	30,829	12,778.20
9	Chicago day	16,002	13,575	4,930.05
11	Vanderbilt, Brooklyn, Artists' and Authors' day	8,854	5,604	2,055.60
12	New York State, Delaware, and Connecticut day	10,326	7,336	2,817.80
13	Episcopal, New York City, and Maccabees day	11,049	7,856	3,150.05
14	Masonic and Pennsylvania day	14,909	11,592	4,543.20
15	Tennessee Women's, Commissioners, Tennes- see College day	10,578	7,364	2,853.75
16	Missouri, Negro Preachers' and Meharry Alum- ni day	16,387	12,870	4,163.10
18	Theosophists, Colonial Dames, and Vermont day	8,519	5,351	1,960.95
19	Congress of Religions, Odd Fellows, D. A. R. ...	9,793	7,127	3,113.25
20	Congress of Religions, West Virginia, Florida tobacco growers	11,681	8,070	3,183.20
21	Director-General's day	33,449	29,957	10,105.60
22	Alabama day	15,200	11,851	4,945.90
23	Public Schools and Memphis day	29,334	25,926	8,241.75



CHILDREN'S BUILDING.

Tennessee Centennial Exposition.

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Statistics of department of admissions, by months—Continued.

OCTOBER—Continued.

Day.	Occasion.	Total daily attendance.	Total daily paid attendance.	Total daily cash receipts.
25	Wholesale and retail clerks, W. N. Press Association.....	9,272	6,218	\$2,133.75
26	National Council of Women.....	14,588	11,333	4,297.50
27	Pythian Press and Ward Seminary.....	18,141	14,700	5,697.70
28	Thomas and Presbyterian day.....	98,579	95,961	34,224.40
29	Council of Jewish Women.....	21,540	18,934	7,225.45
30	do.....	41,703	35,497	9,740.10
	Total	492,831	405,369	145,454.15

Summary of attendance.

	Total attendance.	Paid attendance.	Cash receipts. (From admissions.)
May	205,351	104,525	\$35,721.60
June	302,442	209,929	75,093.00
July	205,913	126,405	40,563.00
August	199,213	124,721	43,034.75
September	273,824	195,743	69,123.40
October	492,831	405,369	145,454.15
Attendance prior to May 1.....	1,679,579	1,166,692	408,989.90
Balance season, tickets, etc.....	5,040	5,040	1,260.00
Attendance after November 1.....	99,493	99,493	13,205.00
	2,602	2,602	649.90
Total	1,786,714	1,273,827	423,869.70

* Estimated number entering wagon gates not accounted by turnstiles, 100,000.

Comparative statement.

LARGEST DAYS AT ATLANTA EXPOSITION.

Date.	Occasion.	Paid attendance.	Total attendance.
Nov. 28	Atlanta	54,263	58,336
Oct. 9	Liberty Bell	24,416	30,611
Oct. 23	President	21,388	28,014
Nov. 19	Georgia and Grady	20,949	25,324
Nov. 29	Women's convention	18,204	22,213
Nov. 13	Commercial travelers.....	17,067	21,671
Oct. 31	First Atlanta.....	17,365	21,252
Nov. 20	Louisiana	14,726	18,728
	Total	188,388	226,149

Comparative statement—Continued.

LARGEST DAYS AT TENNESSEE CENTENNIAL.

Date.	Occasion.	Paid attendance.	Total attendance.
Oct. 26	Thomas	95,961	98,579
Sept. 11	Nashville	38,963	41,553
Oct. 8	Nebraska day	30,829	35,062
Oct. 21	Director-General	29,957	33,449
Oct. 23	Public schools	25,926	29,334
June 23	Confederate veterans	24,407	26,342
June 24	do	22,657	26,599
June 11	McKinley and Ohio	20,792	25,212
	Total	289,492	318,135

APPENDIX I.

LIST OF SPECIAL DAYS, CONGRESSES, ETC.

May 1.—Formal opening of the Exposition. Moretti fountain started. Formal opening of the children's building. New Union Depot, enlarged to accommodate centennial travel, formally opened. Fisk students entertained in the negro building. Dedication of the Knoxville building. Reception in the woman's building. Bellstedt-Ballenberg Band began their engagement.

May 1-3.—Supreme Senate Knights of the Ancient Essenic Order.

May 3.—Formal opening of the woman's building. Arion begins his engagement, walking on the live wire.

May 4.—Corn show in agriculture building.

May 4-6.—Hermitage convocation.

May 5.—First children's day.

May 6.—First flight of Barnard's air ship.

May 7.—Ossoli Circle convocation. Art day for the United States.

May 7-8.—Freight Claim Association.

May 8.—Public school art day.

May 11.—National Association Railroad Air Brakemen. Formal opening of the Parthenon. Mothers' convocation.

May 11-13.—Tennessee Medical Society.

May 12.—Improved Order of Red Men, Tennessee. Wolverine Press Association. President Thomas presented with a bust of himself.

May 12-14.—Equal suffrage convocation.

May 15.—Knights of Pythias day. Children's day.

May 17-18.—Woman's musical congress.

May 17.—Formal opening of the Government building.

May 18-20.—National Good Citizens' convention.

May 19.—College day convocation. Homœopathic Medical Society of Tennessee. Supreme Council United Order of the Golden Cross.



COMMERCE BUILDING AT NIGHT.

May 19-20.—Tennessee State Bankers' Association.

May 19-21.—National Association Officials of Labor.

May 20.—Hocking Valley Editorial Association. Strawberry show in agriculture building. Formal proclamation of the completion of the Exposition. Wilmington, N. C., day. U. O. G. C. day.

May 21.—Industrial agents of the Seaboard Air Line. Belmont College convocation. Opening of the Blue Grotto. Chinese village complete.

May 22.—Appearance of the Apollo Club, Cincinnati. King's Daughters' convocation.

May 24.—Kentucky day. Victoria day convocation.

May 25.—Announcement of the prize pictures.

May 25-26.—State Federation of Woman's Clubs.

May 26.—Greek letter fraternities' day.

May 27.—Congressional delegation of fifty. First parade of the Orientals. Gondola regatta.

May 27-29.—Southern Wholesale Grocers' Association.

May 28.—State Press Association of Georgia. Railway conductors.

May 29.—Wisconsin day. Formal opening of the foreign section. Bellstedt's "Director-General March" played for the first time.

May 30.—South Carolina Press Association.

May 31.—Bank clerks' day. Order of Railway Conductors. Palmistry demonstration in woman's building.

June 1.—Tennessee day. Governors' day. National Traveler's Protective Association. Giant seesaw started.

June 1-5.—Grand Lodge Knights and Ladies of Honor.

June 2.—Formal opening of the press building. Sons of Veterans, U. S. A., Alabama and Tennessee. Grand Army of the Republic, Department of Tennessee. State League of Republican Clubs.

June 3.—Bread display in the agriculture building.

June 3-6.—Epworth League State conference.

June 4.—National Traveler's Protective Association day.

June 5.—Arkansas Press Association. Formal opening of the negro building. Conclusion of the engagement of the Bellstedt-Ballenberg Band.

June 7.—United States soldiers arrive at the Exposition. Gallatin and Sumner County day. Beginning of engagement of Innes's Band. Innes's "Belle of Nashville" played first time.

June 8.—Tennessee Master Plumbers' Association. First exhibition of cylindrical cotton-bale machine.

June 9.—Winter wheat millers' day. Air ship burst at an altitude of 2,000 feet. Southern League of Master Plumbers.

June 10.—Alabama Press Association day. New York room of the woman's building opened formally. Raspberry show in agriculture building.

June 11.—Ohio day. President McKinley day.

June 11-12.—Ohio Press Association days.

June 12.—Epworth League day. Illinois building turned over to the Exposition by the Illinois commission. Cincinnati day.

June 14.—Fisk University day.

June 15.—Tennessee Press Association day. Kappa Alpha day. Maryland Press Association day. Contracting freight agents of the Georgia Railroad.

June 16-17.—Virginia days.

June 17.—Knoxville day. Knights of the Wise Men. Mary Baldwin Seminary Alumnae.

June 17-19.—Pi Kappa Alpha.

June 18.—Central Traffic Association.

June 19.—Early vegetable show in agriculture building.

June 21.—Missouri Press Association. Kentucky Press Association day. English jubilee day. Knights Templar Grand Commandery (colored). Grand Lodge A. F. and A. M. (colored), for three days.

June 22-23.—State Teachers' Association (colored).

June 22-24.—United Confederate Veterans' days.

June 22-25.—Colored educational congress.

June 22-25.—Grand Chapter Order of the Eastern Star.

June 23.—Texas day. Ashby's Tennessee Cavalry Brigade. Survivors of Archer's Brigade. Tennessee Division U. C. V.

June 24.—Confederate day

June 25.—Georgia women's convocation. Peabody Normal College day. Teachers' day.

June 26.—Georgia Press Association. Georgia day. Franklin and Williamson County day. Reception of Georgia women in woman's building. Innes's "A night at the Centennial," first time.

June 28.—Franklin and Bowling Green, Ky., day.

June 28-30.—Armour Drill Corps, of Chicago.

June 29.—Columbia and Maury County day.

June 29-30.—Million-dollar diamond display in commerce building.

June 30-July 1.—Phi Gamma Delta Fraternity.

July 1.—Pan-American Congress. Phi Gamma Delta day.

July 1-3.—Sigma Alpha Epsilon.

July 2-5.—National Reform Press Association.

July 3.—Sigma Alpha Epsilon day. Independence Day celebration.

July 3-5.—Southern Indiana Press Association.

July 5.—Commonwealth conference day.

July 5-6.—Conference of Populist leaders.

July 6-8.—State Dental Society.

July 7-8.—Conference of Grand Dictators and Reporters, Knights of Honor.

July 9.—Knights and Ladies of Dixie Guards of Memphis.

July 10.—Children's carnival. Normal day. Alabama Negro Normal College day.



HISTORY BUILDING.

- July 12.*—Texas Press Association. Northwest Texas Press Association.
July 12-13.—Epworth League days.
July 13-14.—Baptist Young People's Union.
July 14.—Mrs. Hettie Bradley Kelly in woman's building.
July 15.—South Pittsburg and Marion County day.
July 15-17.—Georgia Weekly Press Association.
July 16.—Reception to Women's Centennial Ward Clubs in woman's building.
July 16-17.—Cotton-seed crushers of the South.
July 20.—Baptist day. International Association of Distributers' day.
Eighth Tennessee Regiment. Cumberland day.
July 20-22.—Senate National Union.
July 20-22.—State Teachers' Association.
July 20-21.—Tennessee Life Insurance Agents' Association.
July 21-22.—Tennessee Druggists' Association.
July 22-24.—West Virginia Press Association.
July 23-24.—Cowboys' League day.
July 28-30.—Tennessee Bar Association.
July 29-31.—Negro Working People's Labor and Art Association.
July 29-31.—Innes's spectacular "War and Peace."
July 30.—Laurinburg, S. C., day.
July 31.—Conclusion of engagement of Innes's Band.
August 2.—Beginning of engagement of Victor Herbert's Twenty-second Regiment Band.
August 3-5.—Stenographers' days.
August 5.—Cheraw, S. C., day.
August 7.—Monteagle day.
August 9.—County courts' day.
August 9-14.—Military week.
August 10.—Grape show. New Orleans and Louisiana day and New Orleans Washington Artillery.
August 12.—Louisville Red Men's day. Custer massacre reproduced. Southern Pines day.
August 13.—Fruit show in agriculture building.
August 14.—Local talent day in the woman's building.
August 15.—Sham battle by United States and State troops.
August 17.—Daughters of American Auxiliary to the Junior Order of United American Mechanics day. Webb's School day. Vegetable show in agriculture building. Southern Lumber Manufacturers' Association. Alabama Car Service Association.
August 17-19.—Colored Odd Fellows of Tennessee.
August 18.—Order of Hoo Hoo. State Board of Health. National conference of State Board of Health. Health officers of Tennessee.
August 19.—Texas negroes' day.

August 20.—Louisville and Nashville Railroad employees' day (Louisville). East Tennessee fruit exhibit at Knoxville building.

August 24.—Knights and Daughters of Tabor. Brothers of Friendship and Sisters of the Mysterious Ten.

August 24-27.—Cincinnati Enquirer Club.

August 25.—Centennial negro employees' day. Young People's Christian Union day. Pearl School Drill Corps.

August 25-29.—Sigma Chi.

August 26.—Lumberton, N. C., day. Memphis Woodmen's day.

August 28.—Montgomery County negro day.

August 30.—General Insurance Agents' Convention day.

August 30 to September 2.—Cumberland Presbyterian Conference.

September 1.—Cake, bread, honey, and wine display in agriculture building. Recital in woman's building, Miss Sax and Mrs. Dreier.

September 1-2.—National Race Council days.

September 2.—Indiana Woman Suffrage Association.

September 3.—Carroll County day. Coffee County and Moore County day.

September 6.—Labor Day.

September 7.—Iowa day. Close of engagement of Victor Herbert's band.

September 7-8.—Association of Experiment Station Veterinarians.

September 7-9.—United States Veterinary Medical Association. State Veterinary Medical Association.

September 8.—Beginning of engagement of Conterno's band.

September 8-10.—American Fruit Growers' Union.

September 9.—American Fruit Growers' day. Recital in woman's building, Miss Sax and Mr. Washburn.

September 10.—Brandon Training School day. Fruit and Vegetable Growers' day. Bedford County day. Warren County and White County day.

September 11.—Nashville day. Conterno's "Battles of Our Nation," first time. Attendance passed the million mark. Classical concert in woman's building.

September 14.—Cotton day. Memphis day. Shelby County day. Marshall County day.

September 14-15.—International Association of Fire, Police, and Telegraph Superintendents. Tennessee Association of Deaf Mutes.

September 15.—Southern Irrigation Congress. Business Woman's Convocation. United States Military Telegraph Corps.

September 15-17.—Old-Time Telegraphers. National Association of Colored Women.

September 16.—Free Home League of Oklahoma day.

September 16-18.—National Road Parliament.

September 17.—Physicians and Surgeons' day.



MINERALS AND FORESTRY BUILDING.

September 18.—Louisville and Nashville shop men from Howell, Ind. Mother Goose Carnival, Children's day. Arkansas Day Convocation in the woman's building.

September 20.—Young Men's Institute day.

September 21.—Irish-American day. Carnival pageant. Sham battle reproducing the battle of New Orleans. Governor Wolcott and party arrive from Massachusetts.

September 21-23.—National Association of Mexican War Veterans.

September 22.—American Society of Railroad Superintendents. Ancient Order United Workmen day. American Forestry Association. Emancipation day. Chattanooga and Hamilton County day.

September 23.—Massachusetts day.

September 23-26.—National Spiritualists' Grand Mass Convention.

September 25.—Parthenon day. Bethel College day.

September 27.—Journeymen Plumbers, Gas Fitters, Steam Fitters, and Steam Fitters' Helpers of the United States and Canada.

September 28.—Junior Order of United American Mechanics.

September 28-30.—Peninsular Press Association.

September 29.—Southern Seed Congress. Louisville and Nashville shop men from New Decatur, Ala.

September 30.—Kate Kirkman day. Fire underwriters' day.

October 1.—Reunion of the Crockett Clan.

October 2.—Conclusion of the engagement of Conterno's band.

October 4.—Beginning of the reengagement of the Bellstedt-Ballenberg band.

October 4-5.—Art convocation.

October 5.—Rhode Island day. Evansville day. Rex carnival.

October 5-10.—American Society of Municipal Improvements.

October 6.—German-American day. Detroit day. Michigan day. Fisk Jubilee day.

October 6-7.—Liederkrantz Society of Louisville.

October 6-8.—United Typothetæ of America. American Association of Photoengravers.

October 7.—North Carolina day. New Jersey day. King's Mountain day. Congress of Southern Commercial Clubs. Southeastern and Mississippi Valley Freight Rate Association. Southeastern Freight Association, and Association of Railroads of Virginia and the Carolinas.

October 7-10.—Sons and Daughters of the American Revolution.

October 8.—Montgomery County day. Nebraska day; William J. Bryan. Daughters of the American Revolution day, and Children of the American Revolution Society.

October 8-9.—Commercial Men's Congress. American Association of State Weather Service Officials. Social Science convocation.

October 9.—Illinois day. Chicago day. St. Bernard coal miners' day.

October 11.—Vanderbilt day. Brooklyn day.

October 11-12.—Authors and Artists' Congress.

October 11-13.—Local council of Memphis.

October 12.—New York State day. Durham, N. C., day. Tri-State Medical Society, Alabama, Georgia, and Tennessee. Hartford Phalanx. Connecticut day. Delaware day.

October 12-14.—Southern Conference of Charities and Corrections. National Sanitary Association.

October 12-15.—American Association of Traveling Passenger Agents.

October 13.—New York City or Manhattan day. Maccabees' day. Episcopal day.

October 13-15.—Niagara Frontier party visited the Exposition in the interest of the Pan-American Exposition.

October 13-15.—American Humane Society. Sigma Nu Fraternity.

October 14.—Masonic day. International Association of Police and Fire Telegraph Superintendents.

October 14-15.—Watauga Chapter of the Daughters of the American Revolution. Directors and Commissioners.

October 15.—Kappa Sigma day. Tennessee College day. Reunion of pupils of the famous Nashville Female Academy. Mystic Shriners. Louisville day.

October 15-16.—Phi Delta Theta Society. American Medical Association of Colored Physicians.

October 16.—Virginia Military Institute cadets arrive. Meharry Alumni day. Negro preachers' day. Nashville Club day. Missouri day. St. Louis day.

October 18.—Colonial Dames' convocation. Vermont day. New Century day.

October 18-19.—Theosophical Society.

October 18-21.—International Revenue Employees' National Association.

October 19.—Independent Order of Odd Fellows' day. Liberal Congress of Religions. Norfolk, Va., day. National Daughters of American Revolution.

October 19-21.—Southern Homœopathic Association.

October 20.—West Virginia day. Florida Tobacco Growers' day. Children of the American Revolution. Tree planting, by Watauga Chapter, Daughters American Revolution.

October 21-23.—General Federation of Women's Clubs.

October 21.—Director-General E. C. Lewis day. Sham battle. American warehousemen's day.

October 22.—Farmers' day. Alabama day.

October 23.—Printers' day. Laborers' day. Woman's Press Convocation. State school children's day. Memphis and Charleston freight agents.

October 25.—Wholesale and retail clerks' day.



NEGRO BUILDING.

October 25-27.—National Council of Women. National Pythian Press Association.

October 27.—Ward Seminary day. Woman in music convocation. National Household Economics Association.

October 28.—J. W. Thomas day. Presbyterian day. Atlanta day. Sham battle.

October 30.—Nashville Press day. Georgia legislature. Closing day celebration.

APPENDIX J.

THE EXPOSITION AND ITS STRUCTURES.

[Reprinted from an account by Robert A. Halley in the *Nashville American*, May 1, 1897.]

The site of the Exposition could not be more favorably located, and, indeed, there was no other location which could have been so improved by the expenditure of a similar amount of money. Including West Side Park and adjacent property, there are about 200 acres available, and the greater part of this is occupied in one way or another. Less than 2 miles from the public square, which is the acknowledged center of the city, it is sufficiently elevated to command a fine view of the entire western portion of the city and the outlying suburb to the northeast and southwest of the city of Nashville. In the distance the State capitol looms up in its grandeur and the entire aspect is one that is intensely pleasing to the eye.

THE SITE.

When the Exposition people took charge they found a park with hundreds of trees well kept, and to these they have added hundreds more, which now lend their shade to the visitor and suggest the delightful evenings to be spent under them the coming summer nights. The beautiful blue grass covers every spot which would otherwise be vacant, and through the green borders wind charming shaded avenues and walkways. Flowers are everywhere, in beds, in masses, in banks, or single plants throw up their heads proudly wherever there is a warm spot or a pretty view. Orange trees and lemon trees show their golden or yellow fruits, and the palms of the Tropics rear their stately tufts of dark green foliage. Cacti fill beds in the sunny corners, and here and there all summer long will be blooms of that strange barbaric beauty and brightness that characterize these wonderful children of the desert. Scarlet geraniums, multicolored coleus, and fiery nasturtiums lend their glow and color to the beautiful outdoor decorative scheme. Through the quiet waters of the lakes glide the gondolas of Venice, steered by the sons of the sunny land where their picturesque garb may be seen at home, but where it can not lend a more

artistic beauty to the landscape. Arbors of native vines, and one arbor where only the strange tropical vines of the gourd family grow, offer a cool and shaded retreat to those whose feet have trod the walks of the Exposition till they tire from the very surfeit of delight. Under the trees and in the arbors the sultry heat of the summer may not reach, and spring and autumn lend added beauty to the prospect when seen through the green curtains of the vines.

MINERALS AND FORESTRY BUILDING.

The first building to greet the eye after the visitor has fully admired the prospect and starts on his tour of the displays is that known as the minerals and forestry building. It stands on the space between the northern shore of Lake Katharine and the southern extremity of Lake Watauga. It is not only prominent, but handsome and commodious. It belongs to the Doric order of architecture as modified by the Romans when they had attained their highest excellence in the art of building. Its size is 526 by 124 feet, with an annex 72 by 162 feet. Its main entrances are three in number and each is marked by an imposing portico with six columns. This gives the building a pleasing general effect. The columns guarding the entrances are crowned by sculptural gables in high relief and of beautifully appropriate designs.

The minerals and forestry building is filled with the products of the mine and forest, and includes every variety of materials used for building a home, from the humblest cabin to the palace. Not only the marbles, the stones, the clays, the minerals, the coals, the ores, the precious metals, and the woods of Tennessee, and the vast number of their varied products in all branches of industrial art, there to be shown, but there will be some of the finest products of other States in the same lines. Georgia has a magnificent exhibit of her products in minerals and forestry, and other States have made valuable contributions to the same work. Two structures inside the building are of particular interest—the cabin built of Marshall County cedar logs taken from a structure which stood for over eighty years, and the reproduction of the Ann Hathaway cottage, to be used as Hamilton County's headquarters. The State's display is particularly fine.

THE AUDITORIUM.

West of the minerals and forestry building stands the auditorium, where the big concerts and conventions will have possession during the Exposition. With a seating capacity of 6,000, it is deemed ample for all gatherings except on special occasions. Colonial in style and Ionic in treatment, its airy porticos, facing the points of the compass, give the building the shape of a short cross, except for the colonnades extending from the main entrance around in either direction to the ends of the building. Above the colonnades are balconies from which immense numbers



TRANSPORTATION BUILDING.

of people may view the fireworks at night or the pageants of the day. From the tower, 100 feet above the roof, can be had a view of the electrical effects at night which will not be equaled by any other view on the grounds. In the day from this tower can be had a fine view, not only of the Exposition, but of the city of Nashville farther away. The inside finish is of hard wood, and a broad gallery extends around three sides of the hall. The stage and band pit are of ample dimensions, even for the great bands engaged and for the great conventions booked for holding there this summer.

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THE WOMAN'S BUILDING.

The woman's building illustrates what woman has accomplished in the past hundred years. The pioneer's cabin of logs near at hand, with spinning wheel, hand loom, and all the early implements with which women of that day did their work, stands as a forcible comparison between the women of then and the women of now. Every appliance of modern art, every convenience for the home, and every decorative idea for the advancement of the higher tastes will be found in the splendid palace which the Exposition management has feared to perpetuate the high regard of Tennesseans for woman. The woman's building is modeled a little after the Hermitage, and some pleasing features of the Grecian architecture have been added with fine effect. The building is 160 by 65 feet, and eight massive columns support the roof, which is surmounted by an observatory. A flight of steps of pink Tennessee marble lead to the entrance. The surroundings are most beautiful, including the splendid Moretti fountain, the three other fountains, besides one in the main hall. Of the interior of the building much might be said without giving an adequate idea of its beauty. The assembly room, decorated by the Knoxville women, will be the meeting place of the many women's conventions arranged for during May and October. There is a parlor for the president, Mrs. Kirkman, elegantly furnished by the contributions of women of the State. There is the magnificent main hall, furnished and decorated by the Memphis women; the red-cedar room, decorated by the Murfreesboro women, where relics of the three Presidents, Jackson, Polk, and Johnson, will be seen; Chattanooga room, Georgia room, New York room, Mount Vernon room, Colonial bedroom, Oriental room, model kitchen, where demonstrations in cooking will be given free during the summer; a display of laces of the world, a vast collection of the art works of women in every branch of decorative and applied art; a library of the books written by women, the room where the patents and inventions of women are shown, the sales-room, where articles for sale are kept, and a number of others. All are beautifully decorated and furnished. The halls are full of displays from the counties, and many other things are to be seen.

COMMERCE BUILDING.

Commerce and Agriculture are the two words which appear on the seal of the State of Tennessee and the two leading exhibit buildings were therefore very appropriately named thus. The commerce building is the largest structure on the grounds, being 591 feet long and 256 feet in width. It is likewise the most striking and commodious of the Exposition group. The interior is divided into aisles and a nave, the former 25 feet and the latter 45 feet high. The central pavilion is two stories in height, the second story forming a gallery on either side 145 by 160 feet, overlooking the nave, and is reached by four broad stairways, one at each corner. The general style is based on the Corinthian and Ionic orders of the Græco-Roman. Over the central pavilion a dome rises to a height of 175 feet, and when the elevators are running there will be a grand view of the surrounding country to be had from the top. Inside the building is the most elaborately decorated of any of them, and there is the handsomest line of exhibits ever grouped in an exposition. These embrace every article of general commerce and art, and come from all the countries of the world. There is a large foreign section, and it is filled with rare and costly displays.

THE PARTHENON.

It is the Parthenon, beautiful and majestic, that beggars description. The most callous and careless observer must acknowledge its splendor, and as the first reproduction of that famous building it will bring many thousands of people here who have no other incentive to come. Its 58 fluted columns, its wonderful statuary, and the absolutely perfect manner in which every detail of drawing, construction, and coloring are carried out can not fail to interest the visitor who comes within sight of it. Inside there is the grandest collection of pictures ever brought to the South, aggregating in value over a million dollars. To describe this structure and its contents intelligently would require more space than can be given in a newspaper article. It stands like a chapter from the ancient times for the inspection and wonder of the civilized world.

PALLAS ATHENE.

In front of the Parthenon stands Miss Enid Yandell's gigantic statue of Pallas Athene, 41 feet in height, including the pedestal, and modeled after Fruhner's Pallas de Velletri, which is in the Louvre, Paris. This is regarded by critics abroad as the most beautiful and most justly celebrated of all. It is the largest statue ever executed by a woman.

THE ERECTHEON.

The Erectheon, which stood near the Parthenon, was reproduced for the history building, and is one of the really beautiful structures, though not



PARTHENON.

of large size. It contains about 4,200 square feet, and is intended to receive only the priceless exhibits of an historical nature. Rooms are set apart for the Tennessee Historical Society, Daughters of the Revolution and Colonial Dames, Confederate Veterans, Grand Army of the Republic, and for miscellaneous exhibits. This building will be a center of interest, for the articles will be in every case carefully selected, and nothing except of a rare and valuable character will be admitted.

THE CHILDREN'S BUILDING.

There is no prettier little building on the grounds than the pretty structure erected for the children of the State. The first suggestion of a building for which the children should contribute the money and which should be filled with things of especial interest to them was promptly met and a considerable amount of money was secured. The design is chaste and the interior arrangement adapted well for the purposes had in view. The school exhibits of the State from schools below the grade of a college will be seen in this building. There is a collection, also, of the curios sent for the purpose by United States consuls in many parts of the world. During the Exposition there will be entertainments by various schools of the State in the children's building, and the first Wednesday in every month will be children's day.

TRANSPORTATION BUILDING.

The excessive poetic simplicity of the transportation building is remarkable. There are no columns; but the artistic grouping of the masses and proportioning has given a very pleasing effect. The structure is 400 feet long and 120 feet wide, and stands near the western border of Lake Watauga. Immediately in front of this is Lily Lake. The sculpture and relief work illustrate the development of the art of carrying from the old creaking cart to the lightning express and even the flying machine of the future. The exhibits show what has been done recently in the improvement of transportation facilities and what was done in the initial stages of the railroad era. The De Witt Clinton train, the first, will stand side by side with the modern locomotive and its train of elegant vestibule cars. Vehicles of every variety will be shown in their most splendid finish.

AGRICULTURAL BUILDING.

The products of the soil of Tennessee will be exhibited in the agriculture building, by many considered the gem of the entire Exposition group. The Renaissance style of architecture has been used, and the dimensions are 525 feet by 200 feet. The central dome rises 100 feet, while six minor domes lend a charm to the whole which can not be described. Four entrances lead under arches with statuary. The classic lines and beautiful proportions can be seen from almost every part of the grounds to advantage, and at night the building is particularly adapted for an electrical

display. The interior decorations of this building have been pronounced superior to anything ever seen before in the history of expositions, surpassing, according to Chicago people themselves, the best seen at the World's Fair. Within will be the vast and varied productions of Tennessee; and agricultural implements, still and in motion, from nearly every first-class factory of the country. The decorations made from field products are especially fine, and each of the small domes is decorated with a single product—one in corn, one in tobacco, one in cotton, and one in grain.

MACHINERY BUILDING.

In the machinery building utility and beauty are united, satisfying the artistic tastes and practical demands at the same time. The building is 375 by 138 feet, and in outline and detail it satisfies the most fastidious tastes in architectural art. There is no steam admitted, that being supplied from the power house, some distance away. This will keep the building pleasant on warm days, and enable visitors to see it without discomfort. The various machines in operation in this building will manufacture a number of things of interest, and one of these working exhibits will be a ribbon-weaving loom. The great engines moving noiselessly will be no small part of the interest, as there are some of the finest here that were ever made.

NEGRO BUILDING.

The negro building, which many think the most beautiful on the ground, not only in situation, but in design, is one of the finest evidences that could be given of the feelings of the white men of the South for their former slaves. The negroes of Tennessee have the opportunity of their lives to make this display educational in the highest sense, and this they are doing every day. The building was not completed in time for the entire exhibits to be arranged, but since it was turned over the negro department has done great work in getting it stocked with the many fine exhibits which they had gathered from every part of the State and the South. The view of the building across the fair Lake Watauga is no more beautiful than the displays within, for the outside of the structure can not tell the story that is told by the interior. That story is the story of the negro race from the days of slavery to the present—the story of achievement under obstacles often seemingly impossible to overcome. The school exhibits and the exhibits showing the life of some of the graduates after their school days closed and real life began are of notable interest.

HYGIENE AND EDUCATION.

The hygiene and educational building was really an outgrowth of the increasing size of the Exposition. The space assigned these two departments was so soon filled that the need of greater accommodation early made itself felt. The final result was the erection of this structure, and



WOMAN'S BUILDING.

not only has the space been taken up, but the gallery of the commerce building has been taken as an annex to the educational department. The building is in the Renaissance style, and is 144 feet square. A peculiarity is that the four sides are identical in finish, and the only difference to be noted is that on the south side there will be two groups of statuary, representing oratory and philosophy. Inside the educational department will be seen the finest and most complete collection of school work ever shown at an exposition anywhere. This will include all work done by schools of and above the grade of colleges. The lower schools will place their work in the children's building. In the hygiene department will be grouped one of the most unique, attractive, and instructive exhibits ever placed before the American public. Everything pertaining to the science of health will be exhibited, and it will all be of interest to intelligent people.

ADMINISTRATION BUILDING.

The building used for the administration building will be abandoned in a few days and will then be used for a restaurant and clubhouse. The administration building will be the pretty little cottage built about a year ago by Mr. Edward Adamson, and here the offices of Exposition officials will be kept till the Exposition closes.

RAILWAY EXHIBIT BUILDING.

The railway exhibit building, erected by the Nashville, Chattanooga and St. Louis Railway, is a beautiful structure at the northwest part of the grounds, and exactly 100 feet square. It will contain the terminal station and exhibits also. The passengers who come by the railway, either from the city or from other places, will be landed here in one of the most complete exhibit buildings erected on the grounds. In it are displays; among other things, a sample of everything that has been grown profitably in Tennessee. The timbers, the ores, the products of the State, are all given space, and form the most complete showing that has ever been made of the things which the State grows. The immense log shown is an example of what is done down this way in wood.

EMERGENCY HOSPITAL.

The emergency hospital, back of the clubhouse, will be a very useful place, even if it be never needed. The occurrence of a single case requiring attention would be a very serious matter if no such place were provided. As it is, everything has been arranged for prompt attention in any case of accident that may be reported.

MEXICO BUILDING.

The Mexico building is a long, low structure in the southern part of the grounds, and will be occupied by Mexico, New Mexico, and Chile, as well

as by any other of the South or Central American Republics. The exhibit made by Mexico is far better than that made at the World's Fair, and contains a great many more relics. These are of the greatest interest, as many of them are from the Government Museum and have not been exhibited before.

THE POWER HOUSE.

The power house shows the finest boiler plant ever set up in the South, and will supply steam to all parts of the grounds, as well as furnish the great electric-light system. It is a place full of interest to those who desire to study the finest plant of the sort in the country at actual work.

PYRAMID OF CHEOPS.

Near the Parthenon, on the north side, is a gaudy colored building of curious construction which never fails to attract attention. It is the reproduction of the pyramid of Cheops at ancient Memphis in Egypt. Memphis, which is in Shelby County, built it for the county building, and it is not only the headquarters of the visitors from Shelby, but it contains the exhibits from that county.

RED MEN'S WIGWAM.

The gaudy tepee of the Red Men is a structure that must be seen. Its attractiveness is such that you can not miss it. The little wigwams at the six sides of the large central one are for the various tribes found in Nashville, and each is painted with the appropriate colors. On St. Tammany's Day there will be a great celebration and a sham battle after the dedication of the wigwam.

THE RIALTO.

The Rialto, built from the original in Venice, is an attraction that will be doubly attractive when the score of bazars are open for business and the colored lights are turned on at night.

THE FLAG POLE.

The flag pole is the cause of more questions than anything else on the grounds, because it is invariably asked: "How tall is it?" It is 285 feet, and the pole itself represents Tennessee. There are fifteen columns around the pavilion at the base, each of a different Tennessee wood. These represent the fifteen States that preceded Tennessee into the Union. The sixteenth, the flag pole, is Tennessee.

THE PYTHIAN BUILDING.

The Knights of Pythias have one of the prettiest headquarters ever built at any exposition. In it there will be reading rooms, resting rooms, and all the comforts of a home, to be enjoyed by members of this order and their families who come to the Exposition.



MEXICAN BUILDING.

THE PALACE CAR.

The Seaboard Air Line Palace Car is one thing which is there for a purpose. It is the headquarters of all the towns and cities on the line of that road, and in it about every ten days some one of the cities will be the host and give a banquet which will be attended by citizens of that place and by invited guests.

THE JUNIOR ORDER BUILDING.

The Junior Order of United American Mechanics have a pretty building to the south of the wigwam, and will have everything there for the comfort and entertainment of their members.

The Cotton Belt Line has a neat pavilion near the Transportation Building for their exhibits.

The photograph gallery is both attractive and beautiful, and worth a visit from anyone who wants a good picture.

KNOXVILLE BUILDING.

Capitol avenue is a thoroughfare which has been laid out but a short time, but six very handsome structures are either up or nearing completion. The largest of these is the Knoxville Building, in which that prosperous city will have headquarters and which will be filled with Knoxville exhibits. It is nearly complete and will be a most interesting place to visit.

ILLINOIS BUILDING.

At the far end of the avenue is the fair white Illinois Building, the reproduction of the Administration Building at the World's Fair, where the great State of Illinois and the great city of Chicago will do the honors during the Exposition. The 48 statues which ornament this building are like those on the Administration Building at Chicago, and cost over \$1,000 each to model. The same models were used for these.

CINCINNATI BUILDING.

Directly opposite Knoxville Building is the Cincinnati Building, the first to be commenced on the avenue, and it is now about ready for dedication. The people of Cincinnati have from the first taken an interest in this Exposition, and as soon as they became satisfied that the Exposition was going to be a success they went to work and raised the money for this building.

NEW YORK BUILDING.

New York State is about finishing up a building that will be very delightful to all visitors. It is commodious and well planned, and the interior decorations are in keeping with the character of the structure. The building cost a large amount and will be the center of many pleasant times before the Exposition closes.

LOUISVILLE BUILDING.

Louisville is erecting a building the design for which shows the beauty of the idea carried out, and here will be another place where social pleasure will abound. The building will be the rallying place for all Louisville people and for Kentuckians as well, and the close relations between the States will be closer than ever before the show is over.

THE PRESS BUILDING.

The press of the country has been kind to the Exposition, and the management has remembered them by erecting for the newspaper men a commodious and convenient place where they may work or rest. The building is of the prettiest design and is now about finished.

APPENDIX K.**PRELIMINARY REPORT OF JURY OF AWARDS, TENNESSEE
CENTENNIAL EXPOSITION, 1897.**

TWIN OAKS,

*West Washington, D. C., December, 1897.**To the Director of Affairs of the Tennessee Centennial Exposition:*

I have been requested to prepare a report of my work as commissioner of awards for the Tennessee Centennial Exposition, held in Nashville from May 1 to October 30, 1897.

First I desire to thank the executive officers for the uniform courtesy extended to me, and to express my appreciation of the constant and most valuable aid given to me by Dr. William L. Dudley, director of affairs, and Mr. E. F. Blodgett, superintendent of installation. Without their assistance and their skillful and orderly arrangement of the exhibits, the work of the commissioner and jury would have been greatly increased and its value lessened. To the secretary, Dr. David T. Day, and to his valuable counsel, is due much of whatever success I may have attained. It was his suggestion that every exhibitor making application for an award should give a full description of his exhibit and the reasons for asking an award. These applications were forwarded to me and divided into thirteen departments; they were then numbered, each assigned to the department to which it belonged, and returned to the Exposition authorities, by whom the exhibits were arranged and labeled.

At my suggestion the superintendent of installation prepared plans for the buildings, giving the locality of each exhibit, and furnished guides to point it out. In some expositions much time has been wasted in looking for exhibits, but so complete was the system of installation that it was



TOBACCO PATCH IN FRONT OF AGRICULTURE BUILDING.

frequently remarked that no one asked a second time for the location of an exhibit.

The jury.—In selecting the jury my desire was to obtain as chairmen gentlemen of good administrative ability and general knowledge of the exhibits in their department, and associated with them gentlemen and ladies who would carefully examine and could properly estimate the value of those exhibits.

In the jury of manufactures and commerce the chairman was a gentleman connected with one of the largest mercantile firms in New York, of great executive ability, and with more or less knowledge of every article in his department. One of the jury was a gentleman well fitted to pass judgment upon the gold and silver exhibits, another was well acquainted with chemicals, another with textiles, another with the manufacture of boots and shoes, while still another was buyer for one of the largest companies in the country; two were general merchants well acquainted with the buying and selling value of most of the articles in their department.

The chairmen of the different juries together formed a court of highest awards, to whom any question could be referred.

Members of the Jury of Awards.

AGRICULTURE.

Joseph E. Washington, Cedar Hill, Tenn., chairman.

Joseph Wheeler, M. C., Wheeler, Ala.

Charles F. Marvin, Department of Agriculture, Washington, D. C.

AGRICULTURE AND GROUNDS.

Ernest Flagg, architect, New York, chairman.

F. J. V. Skiff, director, Field Columbian Museum, Chicago, Ill.

Edgar Seeler, professor of architecture, University of Pennsylvania.

COMMERCE AND MANUFACTURES.

M. H. Chase, New York (R. H. Macy & Co.), chairman.

C. A. Collier, director-general of the Atlanta Exposition, 1895, Atlanta.

William C. Lovering, M. C., Whittenton Manufacturing Company, Taunton, Mass.

Orville T. Waring, New York, general merchandise.

George F. Kunz, New York (Tiffany & Co.), gold and silver ware.

Ludwig Nissen, former president New York Jewelers' Association, New York.

T. W. Childs, Toledo, Ohio, boots, shoes, and leather goods.

F. W. Clarke, Smithsonian Institution, Washington, D. C., chemistry.

Charles R. Dodge, Department of Agriculture, Washington, D. C., textiles.

J. S. Menken, Memphis, Tenn., general merchandise.

Marcus Benjamin, National Museum, Washington, D. C.

DECORATIVE ARTS.

Dunham Wheeler, New York, chairman.
Mrs. Stephen B. Elkins, Elkins, W. Va.
Mrs. Joseph Washington, Cedar Hill, Tenn.
L. F. Roos, of Knoedler & Co., New York.

EDUCATION.

B. L. Whitman, president of Columbian University, Washington, D. C.
W. B. Powell, superintendent of schools, Washington, D. C.
Mrs. Ellen H. Richards, professor, Massachusetts Institute of Technology,
Boston.

HISTORY AND LITERATURE.

Mrs. Porter King, Atlanta, Ga., chairman.
Thomas Nelson Page, Washington, D. C.

HORTICULTURE.

P. J. Berckmans, president American Pomological Society, Augusta, Ga.,
chairman.
J. H. Small, jr., Washington, D. C.
William Falconer, department of public works, Pittsburg, Pa.

HYGIENE.

George M. Sternberg, Surgeon-General United States Army, Washing-
ton, D. C., chairman.
William Bailey, Louisville, Ky.
E. A. de Schweinitz, Department of Agriculture, Washington, D. C.

MACHINERY AND ELECTRICITY.

John A. Brashear, Allegheny, Pa., chairman.
Brown Ayers, Tulane University, New Orleans, La.
B. B. Allen, Nashville, Tenn.
John Daniel, Vanderbilt University, Nashville, Tenn.
Ambrose Swasey, Cleveland, Ohio.

MINING, GEOLOGY, MINERALS, AND FORESTRY.

Charles W. Dabney, jr., Knoxville, Tenn., chairman.
F. H. Newell, United States Geological Survey, Washington, D. C.
Eugene A. Smith, State geologist, University, Ala.
William B. Phillips, mining engineer, Birmingham, Ala.
John W. Noble, St. Louis, Mo.

TRANSPORTATION.

Martin A. Knapp, Interstate Commerce Commissioner, Washington, D. C., chairman.

W. E. McClintock, Massachusetts State highway commission, Boston, Mass.

WOMAN'S WORK.

Miss Aileen Bell, Washington, D. C.

Miss Jenny M. Higbee, Memphis, Tenn.

System of awards.—A circular was issued to the jury, instructing them that in their investigations, not only should the intrinsic value of the exhibit be considered, but also the novelty, usefulness, and beauty of design and workmanship or material. The awards were of three degrees, and a diploma given with each award. A diploma of honorable mention entitled the recipient to a bronze medal; a diploma of excellence to a silver medal; a diploma of honor, the highest award, to a gold medal. Diplomas entitling to bronze and silver medals were given by the jurors, but those entitling to gold medals were recommended by the jury and referred to the court of highest awards for confirmation. Afterwards it was recognized that many exhibits, while not worthy of a medal, as judged by our standard, nevertheless possessed sufficient merit to entitle them to some recognition, and a certificate of merit was awarded to such exhibits, there being 174 awards of this character. Diplomas were also given for collective exhibits and for personal services in the preparation of exhibits.

Methods of work.—The commissioner and secretary met the chairman of the several juries on October 4, two days previous to the assembling of the other jurors. The duties of the jury and the principles adopted for examining and making awards in the different departments to which they had been assigned were fully discussed. A large room on the Exposition grounds was assigned to the juries, where daily meetings for instruction and conference were held. The jurors examined each exhibit and made their reports to the chairmen. Awards were given on conference with the whole committee. Sometimes an exhibit was examined by one jury and certain features referred to another jury of a different department; the final award was made as the verdict of both juries.

In many cases the reasons for giving or withholding an award were given. This, I believe, has never been done at former expositions, but it was found to be of great value to exhibitors in pointing out excellencies and defects and stimulating to better work.

Another thing which added to the value of the awards, and which was new in the history of expositions, was the promptness with which they were given, thus calling attention during the progress of the Exposition to the exhibits which had received merited recognition.

It seemed to me wise that the number of awards should not exceed 50 per cent of the exhibits. Of these, 10 per cent should be certificates of merit; 25 per cent, diplomas of honorable mention, entitling the recipient to a bronze medal; 10 per cent, diplomas of excellence, entitling to a silver medal; and 5 per cent, the highest award, entitling to a gold medal.

It was impossible to prescribe any fixed rule of awards for all departments. For instance, in fine arts, history, and literature, where the exhibit is the work of the individual artist or scholar; in education, where the teacher gives his best endeavors for the instruction of his pupils, there is an individuality which does not exist in most of the other exhibits. These exhibits received recognition and awards from jurors of acknowledged reputation in the several departments.

There was a considerable difference of opinion among the jurors as to the requirements which should entitle the exhibitor to a gold medal, and much discussion was the result. Several gentlemen, in accordance with the action at former expositions, wished to give gold medals in every case of superior excellence, without regard to the intrinsic value of the exhibit; for beer a little better brewed, or canned goods put up in a superior manner, a gold medal was proposed; while other members of the jury, and among them the commissioner of awards, considered such superiority sufficiently rewarded by a silver medal; holding that a gold medal should be given only for some new invention or some decided and valuable improvement in articles of intrinsic merit. Had this rule been adopted, few, if any, gold medals would have been awarded in the departments of commerce and manufactures. It was also decided that a gold medal should not be given for an invention unless thoroughly and mechanically finished and in every way complete. A new and valuable invention for compressing cotton would have received a gold medal had the mechanism of the compressor been up to the standard demanded for the work required of it. In thus raising the standard of the gold medal we believe we have raised its value to exhibitors, and thus increased its importance in future expositions.

These awards have in a few cases been criticised by recipients. Letters have been addressed to me by exhibitors. These were forwarded to the chairmen of the several juries for their consideration. A meeting of the jury of highest awards was called, at which these letters were considered and final action taken.

Suggestions for future work.—In addition to the report submitted, I would like to add my impressions of the Nashville Exposition and to offer some suggestions, the result of my observations and experiences, which I think may be of value to others.

Tennessee has reason to be proud of her Centennial Exposition. Her people entered into the work with patriotism, energy, and ability. They gave to it liberally of their time and thought and money, recognizing that it would bring into recognition their present prosperity and the future promise of their State. A large debt was incurred, but was defrayed at

the close by the gate receipts. People from the surrounding country, from neighboring and more distant States attended, and carried back not only pleasant remembrances of the people and country, but of profit from the many object lessons gathered there. I concur fully in the opinion of one of our jurors, that the Tennessee Centennial was as great a work and as valuable to Nashville and Tennessee as the Columbian Exposition at Chicago was to the whole country.

The grounds were carefully laid out and faithfully cared for; the buildings well placed and planned. The buildings and the laying out of the grounds are the first objects that attract the attention of visitors. Who that visited the Columbian Exposition will not recall the great white city with its many beautiful buildings—a fairy scene which can never fade from memory—and who that saw at Nashville the reproduction of the most beautiful building of the ages, the Parthenon, outlined against the blue sky, but will remember it as a thing of beauty, a joy forever?

The Government buildings and exhibits were next in interest. These exhibits are of the greatest educational value and interest to the people, and are given alike to State and international expositions. They were not as large as at Atlanta, but of more value because more carefully selected.

The exhibits in arts, education, and history were very creditable and interesting, while those of machinery, electricity, etc., deserved honorable mention.

The foreign exhibits in the buildings of commerce and manufactures were very good, but comparatively few of our home manufactures and industries were exhibited. There were no exhibits of our largest business firms, representing our best work in machinery, nor in glass, pottery, silver wares, silk manufacturing and lace making, book publishing, or the manufactures of boots and shoes. Even Southern cotton factories were not well represented. Answers from two large firms to my letter of inquiry explain the reasons why they sent no exhibits.

The Rockwood Pottery writes: "The value of an international exposition to us is a large volume of sales, an extensive advertisement, and an award which carries real distinction. The bad system of awards at Chicago made them of no value whatever, but in the other two points it was of the utmost service."

One of the largest manufacturers of britannia wares writes: "The value to us as manufacturers consists mainly in the attention drawn to our goods and the advertisement we receive thereby. The awards by judges in recent expositions have, in our opinion, been of very little value for the simple reason that every exhibitor seems, in the opinion of the judges, to be entitled to some award, and the fact that an exhibitor has received an award, we think, creates little impression with the average person."

These letters, and others of the same character, have confirmed us in our opinion that the raising of the standard of awards by our jurors was wise, and will, if followed, prove valuable in future expositions.

Among the exhibits in the commerce building was one of very rare and costly furs. In a State exposition such an exhibit could scarcely find a suitable place. The directors of a State exposition do not sufficiently realize the difference between an international and State exposition. A State exposition is largely local; it numbers its thousands instead of millions, and its visitors are chiefly from neighboring States. Russian sables and Tiffany's diamonds would naturally find a larger sale in Chicago than in Nashville; while machinery for developing Southern industries, and materials adapted to southern climate, and articles of beauty and art within the limits of less extravagant desires might attract purchasers and bring good returns to exhibitors.

It would seem, therefore, that in future State expositions it would be wise as far as possible to make a selection of exhibits which would be of value and interest to the people of the section of the country in which the exposition is held, and to those at a distance who are interested in the products of the neighborhood.

Another exhibit which might be so increased as to be of exceeding value and interest is a loan collection embracing objects of art, foreign and home, ancient and modern. To such a collection ample and suitable space should be offered and such encouragement given to contributors as would secure objects of real importance and value. Such objects should, however, be under the direction of a jury, with authority to select and reject according to their judgment. Such a jury should have the same authority over all the exhibits, thereby eliminating much that is unworthy and raising the whole standard of the exposition. To such an art collection should be added educational, historical, and literary exhibits, offering similar encouragement and placed under similar control.

At Nashville many poor exhibits were admitted at an early date, thereby excluding better exhibits which were offered at a later period.

There are two classes of exhibitors—one (the larger firms) representing our most important manufactures and industries. These exhibits involve a large outlay of money and much valuable time in the preparation and exhibition. To an international exposition they gladly send their products, expecting a large return for their expenditure from increased fame and large sales. A State exposition can not hold out such prospects. The directors of the exposition must feel the importance of such exhibits, making such concessions and offering such inducements as will secure the best possible exhibition. In addition to reduction of rates for space, the directors might undertake to supply capable and efficient agents (employees) to take charge of exhibits, make sales, and take orders.

Another class of exhibits, such as come under the heads of art, education, history, and literature, involve but little expense either to exhibitors or to the exposition; they are therefore very freely offered. These may be, under proper direction, of great interest and value.

The Government buildings should be given a prominent place in every

exposition. Nowhere else can the people learn so much of the vast resources of our country and of what our Government is doing in developing them, as well as in protecting and aiding the people in every department of their activity.

A point of the greatest importance in the success of an exposition is in securing the confidence of exhibitors in the awards, as to this they look for their best advertisement.

To do this a commissioner of awards should be appointed and jurors selected whose character, knowledge, and ability are an assurance of upright, careful, intelligent, and just distribution of awards. Such appointments made in the early planning of the exposition will have a marked influence in the character and number of the exhibits.

* * * * *

I am, with great respect, yours,

GARDINER G. HUBBARD,
Commissioner of Awards.

Awards authorized by jury.

	Gold.	Silver.	Bronze.	Certificate of merit.	Total.
Agriculture	5	6	28	7	46
Children's			14	15	29
Commerce and manufactures	20	100	118	26	264
Decorative arts		11	27	45	83
Education	3	13	19	22	57
History and literature	4	9	13	14	40
Horticulture		10	14		24
Hygiene	3	9	11		23
Machinery and electricity	4	1	33	15	70
Mining, geology, and minerals	3	6	16	10	35
Forestry		5	10	13	28
Transportation	3	8	38	7	56
Total	45	204	341	174	764

Total number of exhibits examined	1,945
Total number of awards	764
Certificates of grateful recognition	9
Certificate of honorable recognition	1
	10

APPENDIX L.**CENTENNIAL CITY ORDINANCES.**

The grounds of the Tennessee Centennial Exposition were incorporated by act of the State legislature as Centennial City, under a limited charter which expired January 1, 1898, and the following ordinances were enacted by the city board, composed of the mayor and aldermen:

CHAPTER I.

Be it enacted by the Board of Mayor and Aldermen of the Centennial City, That the acts hereinafter set out shall be declared misdemeanors and punished as such:

SECTION 1. Whoever shall, within the limits of the Centennial City, set up or keep any gambling table or house, or gambling device, at which any game of chance shall be played for money or property, or anything representing money or property, or at any such table or device, or any game of chance, bet, win, or lose money or property, either in specie or by means of anything representing the same, or shall suffer such table or device, at which any game of chance is played, to be set up or used in any tenement house or building in his or their possession or control, shall be guilty of a misdemeanor.

SEC. 2. Every person found carrying a pistol, bowie knife, dirk knife, sling shot, brass knucks, or other deadly weapon, shall be deemed guilty of a misdemeanor, and, upon conviction of such first offense, shall be fined not less than ten nor more than fifty dollars, at the discretion of the recorder; but upon conviction of every subsequent offense shall be fined not less than fifty dollars; but no ordinary pocket knife nor walking cane shall be construed to be deadly weapon as herein contemplated.

SEC. 3. It shall be the duty of the Centennial guard who sees any person or persons with, or knows of any person carrying, such deadly weapon or weapons, to immediately arrest every such person, to the end that they may be dealt with for the violation of said ordinance.

SEC. 4. It is expressly understood that the provisions of the above sections relating to the carrying of deadly weapons do not extend to police or other officers or persons who are entitled by the law to carry such deadly weapons, nor does it extend to the act of handling or moving such deadly weapons in any ordinary business way.

SEC. 5. All pistols, knives, and other weapons, the carrying of which upon the person is unlawful, which may be found upon the persons of individuals arrested by the Centennial guard, shall be seized by the captain of the guard, or some one by him authorized to do so, and shall be retained by him and forfeited to the mayor and board of aldermen, and shall in no case be returned to the individual from whom the same is taken, or to anyone claiming the same, unless the recorder shall adjudge otherwise.

SEC. 6. It shall not be lawful for any male person of the age of sixteen years or over (except an officer in the discharge of his duty) to ride or walk the streets or other public places of the city in company with a public prostitute, and any person convicted of a violation of this ordinance shall be guilty of a misdemeanor.

SEC. 7. Whoever shall, within the corporate limits of this city, be found in a state of intoxication in any public place or building, shall be deemed guilty of a misdemeanor.

SEC. 8. Whoever shall, within the corporate limits of this city, willfully disturb the peace of others—

By violent, tumultuous, or offensive conduct;

By loud or unusual noises;

By unseemly, profane, obscene, or offensive language;

By language calculated to provoke a breach of the peace;

By assaulting, striking, or fighting another;

By committing a nuisance;

By carrying concealed weapons;

By the discharge of firearms;

By selling or offering for sale articles without license;

By cutting, breaking, injuring, defacing, or ill-using any building, tree, plant, or leaf, or any other thing or property;

By walking on grass plots after being warned to desist;

By bringing liquor into the grounds, except under special permit from the Exposition authorities;

By climbing or attempting to climb the fence around the ground, or walking upon the grass anywhere within the corporate limits of the city—

Shall be deemed guilty of a misdemeanor.

SEC. 9. Whoever shall commit such conduct as set forth in the foregoing section, in any house or premises owned or occupied by him or under his management or control, so that others in the vicinity are disturbed thereby, shall be deemed guilty of a misdemeanor.

SEC. 10. It shall not be lawful to solicit subscriptions or contributions after being warned to desist.

SEC. 11. It shall be unlawful to bathe in any of the interior waters of the ground.

SEC. 12. Any three or more persons who shall, within the corporate limits, either in houses or elsewhere, assemble together with the intent, or, being assembled, shall mutually agree to do any unlawful act with force or violence, against the property of the city, or any property belonging to individuals within the limits of the city, against the peace or to the terror of others, or shall make any movement or preparation to carry out such intent or threat, shall be deemed guilty of a misdemeanor.

SEC. 13. It shall be unlawful, and is hereby declared a misdemeanor, for any person to resist or offer violence when arrested, or attempted to be arrested, or on being arrested by a lawful officer; and the word resist shall

include all persons who shall directly or indirectly influence another to offer resistance to the officer making the arrest, or attempting to make the arrest.

SEC. 14. Whoever shall, within the corporate limits of this city, whether on the grounds or in a public house, appear in any public place naked, or in any dress not belonging to his or her sex, or in an indecent or lewd dress, or shall make any indecent or lewd act or behavior, or shall exhibit, sell, or offer for sale, any obscene, vulgar, or libelous books, picture, paper, or publication of any character whatsoever, which shall be adjudged vulgar or obscene, shall be deemed guilty of a misdemeanor.

SEC. 15. The proprietor of any such exhibition, who shall willfully permit any violation of the above section, or participate in the same, shall be deemed guilty of a misdemeanor.

SEC. 16. It shall be unlawful for any person to paint or mark upon any wall or fence, or upon any pavement or steps, upon houses or other objects about the streets, grounds, or public places of this city, or to in any way disfigure by writing, figuring, or marking them in any way whatever, or interfere without authority with fire hose, fire plugs, or other apparatus, telegraph, telephone, electric wire, and other electric apparatus, and such action shall be deemed a misdemeanor.

SEC. 17. The sale of beer may be authorized within the city limits under proper regulation, and the sale of wine may be authorized as a restaurant privilege; but neither wine nor beer must be sold without authority from the officers of the Centennial Exposition Company, and no bar for the sale of intoxicants shall be permitted within the corporate limits; and a violation of this ordinance shall be deemed a misdemeanor.

SEC. 18. It shall not be lawful for any person or persons whatever to deposit or cause or permit to be deposited, on any streets, alleys, or lakes within the limits of this city, any ashes, sweepings, cleanings from houses, slops or dirty water, or any other filth, trash, or offensive matter whatever, and any persons so offending shall be deemed guilty of a misdemeanor.

SEC. 19. It shall be the duty of the captain of the guard, or his authorized deputy, to enter at least twice a week, or oftener if so directed by the mayor, into and examine the condition of any building, cellar, or privy, or other place supposed to be foul, damp, or otherwise injurious to health, or being or tending to become a nuisance. Notification shall be given to the owner or occupant of the premises to move or abate the same, and if he fail to do so at once, such nuisance or anything tending to constitute a nuisance, shall be moved or abated by the city at the cost of the owner of the premises, and a failure to abate the nuisance when so notified, within twenty-four hours, shall constitute a misdemeanor.

SEC. 20. Whoever shall be convicted of a misdemeanor under any of the provisions of this chapter, shall forfeit and pay to the city a sum not less than three nor more than fifty dollars, and may be expelled from the city limits by the officer of the guard temporarily or permanently, at the

discretion of the recorder. The word misdemeanor, as used in this chapter, is not employed in its ordinary legal sense, but with a view to bring under a general head the offenses hereinbefore specified.

SEC. 21. *Be it further enacted*, That this act take effect from and after its passage, the welfare of the city requiring it.

NORMAN FARRELL, *Mayor*.

Passed April 3, 1897.

CHAPTER 2.

AN ORDINANCE to exclude from the limits of the Centennial City dogs and other animals.

SECTION 1. *Be it enacted by the Mayor and Aldermen of the Centennial City*, That it shall be the duty of the Centennial guard to take every dog or other animal going at large within the limits of the Centennial City and eject the same, unless such animal shall have been brought in for exhibition purposes under proper permit.

SEC. 2. *Be it further enacted*, That this act take effect from and after its passage, the welfare of the city requiring it.

NORMAN FARRELL, *Mayor*.

Passed May, 1897.

CHAPTER 3.

AN ORDINANCE in regard to bawdy houses and sporting women.

SECTION 1. *Be it enacted by the Board of Mayor and Aldermen of the Centennial City*, That it shall be unlawful for any restaurant keeper, concessionaire, or exhibitor, to knowingly or wilfully employ or keep any woman of ill repute within the limits of this city; and it is hereby declared to be sufficient evidence to such restaurant keeper, concessionaire, or exhibitor, of the character of such women that he is notified by the Centennial guard upon order of the mayor.

SEC. 2. It shall not be lawful for any woman or girl notoriously abandoned to lewdness, to be employed or loiter around the premises of any restaurant keeper, concessionaire or exhibitor; or accost, call, or stop any person passing by, or walking up and down the sidewalk, or stroll about the streets of the city.

SEC. 3. The person guilty of a violation of the foregoing sections shall be guilty of a misdemeanor.

SEC. 4. *Be it further enacted*, That this act take effect from and after its passage, the welfare of the city requiring it.

NORMAN FARRELL, *Mayor*.

Passed May, 1897.

H. Doc. 515—13

CHAPTER 4.

AN ORDINANCE for the suppression of loafing and vagrancy and to declare the sale of intoxicants, except wine and beer, a misdemeanor, and prescribe the penalty for the violation thereof.

SECTION 1. *Be it enacted by the Board of Mayor and Aldermen of the Centennial City*, That it shall be unlawful to be found loitering about the grounds of this city or any of the buildings situated therein. Any person is guilty of a misdemeanor who, having no apparent means of subsistence, neglects to apply himself to some honest calling, or who saunters about neglecting his or her business, or who tries to maintain himself by gaming or other undue means.

SEC. 2. *Be it further enacted*, That any reputed thief or disreputable character frequenting any street, walk, building, or any other portion of the grounds of this city with probable intent to commit a misdemeanor or felony, shall be deemed guilty of a misdemeanor.

SEC. 3. *Be it further enacted*, That any person found within the limits of this city armed with any dangerous or offensive weapon, or who shall be found to have in his possession, without lawful excuse, any pick-lock key, crow, jack-bit, or other instrument of housebreaking, or shall be found by night with his face blackened or otherwise disguised with any intent to commit any misdemeanor or felony therein, shall be deemed a vagrant and guilty of a misdemeanor.

SEC. 4. *Be it further enacted*, That every person wandering abroad and lodging in any outhouse, or in any deserted or unoccupied building, or in the open air, or in any cart or wagon, not having any means of subsistence, and not giving a satisfactory account of himself or herself, shall be deemed a vagrant and guilty of a misdemeanor.

SEC. 5. *Be it further enacted*, That the sale of all intoxicants, except beer and wine, as authorized by the charter of the Centennial City, shall be a misdemeanor and punishable as such. This ordinance shall be so construed that each separate sale of such intoxicants shall constitute a misdemeanor.

SEC. 6. *Be it further enacted*, That this act take effect from and after its passage, the public welfare requiring it.

NORMAN FARRELL, *Mayor*.

Passed May, 1897.

CHAPTER 5.

AN ORDINANCE to prohibit fireworks, music, explosives, keeping disorderly house, disturbing peace, soliciting trade or alms, and smoking in buildings, and to govern operations of concessions.

SECTION 1. *Be it enacted by the Board of Mayor and Aldermen of the Centennial City*, That any person or persons who shall play upon any hand organ or other musical instrument in any street, lane, or other public

place in this city, without permission of the Centennial City authorities, shall be deemed guilty of a misdemeanor.

SEC. 2. That if any person or persons shall cast, throw, or fire any squib, rocket, cracker, or other combustible fireworks in the limits of the corporation, every such person for every such offense shall be guilty of a misdemeanor; but special exceptions to this provision may be granted by the Centennial City authorities.

SEC. 3. That any person smoking in the auditorium, or any building containing exhibits, after being warned to desist therefrom, shall be deemed guilty of a misdemeanor.

SEC. 4. That if the proprietors of any beer halls or restaurant shall sell beer or wine after the time authorized by the Centennial City authorities, to wit, eleven o'clock on ordinary nights and half-past eleven on Saturday or such other nights, as may be specially designated by said authorities, they shall be deemed guilty of a misdemeanor.

SEC. 5. Any person or persons who, being proprietors, managers, or operators of concessions within the limits of the city, shall allow patrons or other persons within concession after the time designated by the Centennial City authorities shall be deemed guilty of a misdemeanor.

SEC. 6. Whoever shall permit such conduct as set forth in the latter part of this section in any house or premises owned or occupied by him or under his management or control, so that others in the vicinity are disturbed thereby, to wit, by violent, tumultuous, or offensive conduct; by loud or unusual noises; by unseemly, profane, obscene, or offensive language; by language calculated to provoke a breach of the peace; by assaulting, striking, or fighting another; by committing a nuisance; by carrying concealed weapons; by discharge of firearms; by selling or offering for sale articles without license; by cutting, breaking, injuring, defacing, or ill using any building, tree, plant, or leaf, or any other thing or property; by walking on grass plots after being warned to desist; by bringing liquor into the grounds, except under special permit from the Centennial City authorities; by climbing or attempting to climb the fence around the grounds, or walking upon the grass anywhere in the limits of the city, shall be guilty of a misdemeanor.

SEC. 7. Whoever shall within this city keep a disorderly house, or permit in his house, or any tenement in his possession under his control, any person to be drunk, noisy, and boisterous in his behavior, to the annoyance of any person, shall be deemed guilty of a misdemeanor.

SEC. 8. The aisles in the several exhibit buildings in this city shall be deemed public highways or streets, and whoever shall obstruct the same, solicit subscriptions, alms, or contributions, or drum or solicit trade there, shall be deemed guilty of a misdemeanor.

SEC. 9. Whoever shall be convicted of a misdemeanor under any of the provisions of this act shall forfeit and pay to the city the sum of not less than three dollars nor more than fifty dollars, and may be expelled from

the city limits by the officer of the guard, temporarily or permanently, at the discretion of the recorder. The word misdemeanor, as used in this chapter, is not employed in its ordinary legal sense, but with a view to bring under a general head the offenses hereinbefore specified.

SEC. 10. *Be it further enacted*, That this act take effect from and after its passage, the public welfare of the city requiring it.

NORMAN FARRELL, *Mayor*.

Passed August 12, 1897.

APPENDIX M.

AN ACT for the admission of the State of Tennessee into the Union.

Whereas by the acceptance of the deed of cession of the State of North Carolina, Congress are bound to lay out into one or more States the territory thereby ceded to the United States:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the whole of the territory ceded to the United States by the State of North Carolina shall be one State, and the same is hereby declared to be one of the United States of America, on an equal footing with the original States in all respects whatever, by the name and title of the State of Tennessee. That until the next general census the said State of Tennessee shall be entitled to one Representative in the House of Representatives of the United States, and in all other respects, as far as they may be applicable, the laws of the United States shall extend to and have force in the State of Tennessee, in the same manner as if that State had originally been one of the United States.

JONATHAN DAYTON,
Speaker of the House of Representatives.

SAMUEL LIVERMORE,
President of the Senate pro tempore.

Approved, June the first, 1796.

GEORGE WASHINGTON,
President of the United States.

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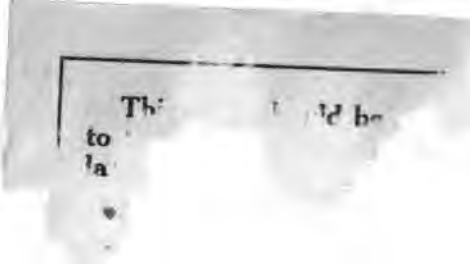
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